# **CONTRACT**

# **SPECIAL PROVISIONS**

Project No.:	STP-0126(6)6	
Name:	SR-0126; MAIN STREET AT 300 N, CLEARFIELD	
County:	DAVIS	
Bid Opening:	APRIL 29, 2003	
	Date	



#### 2002 - U.S. Standard Units (Inch-Pound Units)

#### **Table of Contents**

## **Project #STP-0126(6)6**

- 2002 Standard Specifications for Road and Bridge Construction including Changes One and Two
- II. List of Revised Standard Specifications
- III. List of Revised Standard Drawings
- IV. Materials Minimum Sampling and Testing
- V. Notice to Contractors (Inserted by Advertising)
- VI. Use of Minority or Women Owned Banks
- VII. Bid Conditions Disadvantaged Business Enterprise
- VIII. Attention Contractors
- IX. Specific Equal Employment Opportunity Responsibilities
- X. Required Contract Provisions, Federal-Aid Construction Contracts (PR-1273)
- XI. Wage Rates Applicable/Wage Rates Non-Applicable (Inserted by Advertising)
- XII. Bidding Schedule (Inserted by Advertising)
- XIII. Measurement and Payment (Inserted by Design Engineer)
- XIV. PDBS Project Summary Report (Inserted by Design Engineer)
- XV. PDBS Detailed Stationing Summaries Report (Inserted by Design Engineer)
- XVI. Special Provisions (Inserted by Design Engineer)
  - 1. 00555M, Prosecution and Progress
  - 2. 00725M, Scope of Work
  - 3. 00727M, Control of Work
  - 4. 01284S, Prompt Payment
  - 5. 01557S, Maintenance of Traffic (MOT)

## Federal-Blue Book

- 6. 01892M, Reconstruct Catch Basin, Cleanout, Meter, Valve, Manhole, and Monument Boxes
- 7. 02083S, Relocate Fire Hydrant
- 8. 02221M, Remove Structure and Obstruction
- 9. 02225S, Asphalt Surfacing Removal (Structures)
- 10. 02316M, Roadway Excavation
- 11. 02319S, Potholing for Utilities
- 12. 02610M, Pipe Culverts
- 13. 02742S, Project Specific Surfacing Requirements
- 14. 02765S, Pavement Marking Paint
- 15. 02771M, Curbs, Gutters, Driveways, Pedestrian Access Ramps, and Plowable End Sections
- 16. 02772S, Surface Courses Pothole Patching
- 17. 02776M, Concrete Sidewalk, Median Filler, and Flatwork
- 18. 02788S, Micro-Surfacing
- 19. 02892M, Traffic Signal
- 20. 02922M, Seed, Turf Seed, and Turf Sod
- 21. 02961M, Rotomilling
- 22. 03310M, Structural Concrete
- 23. 03392S, Clear Penetrating Concrete Sealer for Bridges
- 24. 03924S, Structural Concrete Repair
- 25. 03925S, Polymer Overlay
- 26. 03934S, Structural Pothole Patching
- 27. 05831S, Expansion Joint Modification Joint Gland Replacement
- 28. 07923S, Hot Poured Joint Sealer

## I. 2002 Standard Specifications

The State of Utah Standard Specifications for Road and Bridge Construction, U.S. Standard Units (Inch Pound Units) CSI Format, Edition of 2002 with Changes One and Two included applies on this project.

#### II. List of Revised Standard Specifications

## Change One – Included in 2002 Standard Specifications

Revised August 29, 2002

Section 00570 Articles 1.2 A 69, A 71 b (deleted)

Section 00727 Articles 1.1 D; 1.5 B; 1.9; 1.10; 1.16 B, C; 1.18 B

Section 01574 Articles 1.2 B

Section 02721 Articles 1.2 D (added), H (replaced), I (deleted);1.6 B1; 2.1 A Table 3; 3.2 C

Section 02741 Articles 3.8 E 2 a, b

Section 02821 Articles 3.1 A

Section 02892 Articles 1.5 A, B

Section 02936 Articles 1.4; 1.5 C

Section 03152 Articles 1.2 P, Q; 2.2 A, B

Section 05120 Articles 1.4 A (deleted), 3.3 A

Section 16525 Articles 1.6 A, B

## Change Two - Included in 2002 Standard Specifications

Revised December 19, 2002

Section 01561 Article 3.1 A

Section 02075 Article 2.7 A

Section 02372 Article 2.1 A 4

Section 02455 Article 3.3 B 2

Section 02785 Article 3.2 C

Section 02861 Article 3.3 A

Section 03055 Articles 1.2 P (inserted), 2.3 B, 2.4 (deleted), 2.7 A 1 a-e (added), 2.7 B 2

(added), 2.8 A 1 a, 2.8 A 2 (deleted), 2.9 A3, 3.2 A Table, 3.2 C, 3.7 A 3, 3.8 C 1, 3.9 A-

B, 3.10, 3.11 B 1, 3.11 B 3

Section 07922 Article 2.1 Table 1

## III. List of Revised Standard Drawings

## **Change One**

Revised December 19, 2002

AT 7	Polymer Concrete Junction Box Details	12/19/2002
BA 1A	Precast Concrete Full Barrier Standard Section	12/19/2002
BA 1B	Precast Concrete Full Barrier Standard Section	12/19/2002
BA 3	Cast In Place Constant Slope Barrier	12/19/2002
BA 4B	Beam Guardrail Installations	12/19/2002
BA 4C	Beam Guardrail Anchor Type I	12/19/2002
CC 6	Crash Cushion Type E Sand Barrel Details	12/19/2002
DG 3	Maximum Fill Height and End Sections for HDPE	
	And PVC Pipes	12/19/2002
DG 4	Pipe Culverts Minimum Cover	12/19/2002
EN 4	Temporary Erosion Control (Drop-Inlet Barriers)	12/19/2002
GW 1	Raised Median and Plowable End Section	12/19/2002
PV 2	Pavement Approach Slab Details	12/19/2002
SL 13	Traffic Counting Loop Detector Details	12/19/2002
SN 2	Flashing School Sign	12/19/2002
SN 4	Flashing Stop Sign	12/19/2002
SN 5	Typical Installation For Milepost Signs	12/19/2002
SN 8	Ground Mounted Timber Sign Post (P1)	12/19/2002
ST 1	Object Marker "T" Intersection and Pavement	
	Transition Guidance	12/19/2002
ST 7	Pavement Markings and Signs at Railroad Crossings	12/19/2002
SW 3A	Precast Concrete Noise Wall 1 of 2	12/19/2002
SW 3B	Precast Concrete Noise Wall 2 of 2	12/19/2002
SW 4A	Precast Concrete Retaining/Noise Wall 1 of 2	12/19/2002

## IV. Materials Minimum Sampling and Testing

Follow the requirements of the Current Materials Minimum Sampling and Testing Manual:

Materials Minimum Sampling and Testing Manual reference can be found from the UDOT Web Site at:

http://www.dot.utah.gov/esd/Manuals/Materials/MaterialsSampling.htm

For UDOT employees the Manual can also be found on the Shared Drive at: \Shared\Engineering Services\Manuals\Materials (W drive for the Complex and R drive for the Regions)

## V. Notice to Contractors



## NOTICE TO CONTRACTORS

Sealed proposals will be received by the Utah Department of Transportation UDOT/DPS Building (4th Floor), 4501 South 2700 West, Salt Lake City, Utah. 84114-8220, until 2 o'clock p.m. Tuesday, April 29, 2003, and at that time the download process of bids from the USERTrust Vault to UDOT will begin, with the public opening of bids scheduled at 2:30 for SAFETY/TRAFFIC OPERATIONS of SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD in DAVIS County, the same being identified as Federal Aid Project No: STP-0126(6)6.

#### **Federal Regulations:**

In conformity with the Federal-Aid Highway Act of 1968, the U.S. Department of Labor has certified the minimum wage rates to be paid on this contract. These rates are made a part of the contract documents. This Department has been advised by the Wage and Hour Division, U.S. Department of Labor, that contractors engaged in highway construction work are required to meet the provisions of the Fair Labor Standards Act of 1938, (52 Stat. 1060). This contract is subject to all appropriate Federal Laws, including Title VI of the Civil Rights Act of 1964.

Project Location: 0.25 Miles of Route: 126 from R.P. 6 to R.P. 6

The principal items of work are as follows (for all items of work see attachment):

Polymer Overlay Pothole Patching HMA Mix - 1/2 inch

The project is to be completed: in 70 Working Days.

#### Other Requirements:

All project bidding information, including Specifications and Plans, can be viewed, downloaded, and printed from UDOT's Project Development Construction Bid Opening Information website, http://www.dot.utah.gov/cns/bidopeninfo.htm. To bid on UDOT projects, bidders must use UDOT's Electronic Bid System (EBS). The EBS software and EBS training schedules are also available on this website.

Project information can also be reviewed at the main office in Salt Lake City, its Region offices, and its District offices in Price, Richfield, and Cedar City.

Project Plans cannot be downloaded or printed from the website unless your company is registered with UDOT. Go to UDOT's website to register. Unregistered companies may obtain the Specifications and Plans from the main office, 4501 South 2700 West, Salt Lake City, (801) 965-4346, for a fee of \$150.00, plus tax and mail charge, if applicable, none of which will be refunded.

Prequalification of bidders is required. Prior to submitting a bid, the bidder must have on file with the Utah Department of Transportation a completed and approved contractor's application for prequalification. Department processing time is 10 working days from receipt of properly executed documentation.

As required, a contractor's license must be obtained from the Utah Department of Commerce.

Each bidder must submit a bid bond from an approved surety company on forms provided by the Department; or in lieu thereof, cash, certified check, or cashier's check for not less than 5% of the total amount of the bid, made payable to the Utah Department of Transportation, showing evidence of good faith and a guarantee that if awarded the contract, the bidder will execute the contract and furnish the contract bonds as required.

The right to reject any or all bids is reserved.

If you need an accommodation under the Americans with Disabilities Act, contact the Construction Division at (801) 965-4346. Please allow three working days.

Additional information may be secured at the office of the Utah Department of Transportation, (801) 965-4346.

Dated this 05th day of April, 2003.

**UTAH DEPARTMENT OF TRANSPORTATION John R. Njord, Director** 

**Revised Date:** 

## VI. Use of Minority or Women Owned Banks

#### SPECIAL PROVISION

In the spirit of Federal Department of Transportation regulations the Utah Department of Transportation encourages all contractors and suppliers to thoroughly investigate the services offered by banks controlled and/or owned by minorities or women and to utilize their services as deemed feasible.

#### GENERAL DECISION UT020023 01/17/03 UT23

#### **General Decision Number UT020023**

Superseded General Decision No. UT010023

State: Utah

Construction Type:

#### **HIGHWAY**

County(ies):

#### DAVIS WEBER

#### HIGHWAY CONSTRUCTION PROJECTS

<b>Modification Number</b> Publication I	Date
0 03/01/2002	
1 05/17/2002	
2 12/27/2002	
3 01/17/2003	

## ELEC0354C 06/01/2001

	Rates	Fringes
ELECTRICIANS	23.43	6.32+4.2%
* ENGI0003Y 07/01/2000  POWER EQUIPMENT OPERATORS:	Rates	Fringes
Blade smooth/finish	20.92	9.73
Tractor, small rubber tire with attachments	18.92	9.73
IRON0027E 07/01/2002	Rates	Fringes
IRONWORKERS, Reinforcing	20.76	8.62

## SUUT3005A 03/25/1992

50015003A 05/25/1772	Rates	Fringes
CARPENTERS	16.13	2.80
CEMENT MASONS	14.40	2.41
FLAGGERS	6.59	1.75
IRONWORKERS:		
Ornamental & Structural	16.65	3.65
LABORERS:		
General Laborer, Asphalt Raker, Landscape Laborer	10.04	2.53
Concrete Laborer (Compaction, Underground Fine Grading, Operation of Shute or Bucket)	10.04	2.53
Grade Laborer (Uses hand held level to check grade, inserts grade stakes in concrete)	10.04	2.53
Pipelayer (Smooths sides and bottom of trenches, does rigging of pipe, assembles and installs concrete and tile pipe)	11.03	3.54
Laborer, Power Tools (Cutting Torch, Operators of Gasoline, Electric or Pneumatic Tools, e.g. compressor, compactor, jackhammer, vibrator, concrete saw, chain saw, and concrete cutting torch)	12.65	2.79
Fence Erection Laborer (clearing of right of way, unloading of materials by hand, digging of post holes & pouring of concrete in connection therewithin)	10.04	2.53
PAINTERS, SPRAY	14.05	1.62

## POWER EQUIPMENT OPERATORS:

A 1 1/E' '1' M 1'	1 4 1 4	<i>5.6</i> 0
Asphalt Finishing Machine	14.14	5.69
Asphalt Plant Operator	18.05	7.23
Backhoe, Tire & Track, under 5 cu. yds.	13.44	4.57
Backhoe, Tire & Track, over 5 cu. yds.	14.05	7.23
Blade, Rough	11.60	2.22
Bulldozer, All Sizes	18.05	7.08
Chip Spreader	16.29	7.08
Laydown Machine, Asphalt/Concrete	12.53	2.22
Loader, All Sizes	18.05	5.09
Paver, Asphalt	12.53	2.22
Roller, Asphalt	12.80	4.12
Roller, Grade/Compaction	11.01	3.31
Screedman	10.95	3.09
TRUCK DRIVERS:		
Dump Trucks - Water Level Capacity (Bottom, End and Side), Including Dumpster Truck, Turnawagons, Turnarockers and Dumpcrete):		
Less than 8 cu. yds.	10.50	
8 cu. yds. and less than 14 cu. yds.	9.80	2.22
14 cu. yds. and less than 35 cu. yds.	16.14	4.87
Water, Fuel and Oil Trucks:		
Up to 2500 gallons	9.95	2.22
2500 gallons to less than 4000 gallons	11.67	3.31

Oil Spreader Operator where Boot Man is not required	9.25	
Transport Truck	10.90	1.42
* TEAM0222D 07/01/2000	Rates	Fringes
TRANSIT MIX TRUCKS:		
0 cu. yds. to 8 cu. yds.	16.615	8.69

8 1/4 cu. yds. to 14 cu. yds. 16.715

**WELDERS** - Receive rate prescribed for craft performing operation to which welding is incidental.

\_\_\_\_\_

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

8.69

\_\_\_\_\_

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

#### WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U. S. Department of Labor 200 Constitution Avenue, N. W. Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N. W. Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U. S. Department of Labor 200 Constitution Avenue, N. W. Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

# VII. BID CONDITIONS DISADVANTAGED BUSINESS ENTERPRISE (DBE)

#### "Policy Statement"

It is the policy of the Utah Department of Transportation to take all necessary and reasonable actions to ensure that Disadvantaged Business Enterprises (DBE) as defined herein shall have equal opportunity to participate in the performance of contracts financed in whole or in part with US Department of Transportation (DOT) funds under this agreement as modified herein.

#### "Objectives"

The objectives of this policy are to:

- 1. Ensure nondiscrimination in the award and administration of DOT assisted contracts;
- 2. Create a level playing field on which DBEs can compete fairly for DOT assisted contracts;
- 3. Ensure that the DBE program is narrowly tailored in accordance with applicable law;
- 4. Ensure that only firms that fully meet 49 CFR 26 eligibility standards are permitted to participate as DBEs;
- 5. Remove barriers to the participation of DBEs in Federal aid contracts;
- 6. Assist the development of firms that can compete successfully in the marketplace outside the DBE program; and
- 7. Provide appropriate flexibility in establishing and providing opportunities for DBEs.

## "Responsibilities"

Implementation of the DBE Program is accorded the same priority as compliance with all other legal obligations incurred by the DEPARTMENT in financial assistance agreements with DOT.

1. The Civil Rights Manager shall be the DBE liaison officer, who shall have direct, independent access to the Executive Director concerning DBE program matters. The Civil Rights manager shall be responsible for implementing all aspects of the DBE program. Adequate staff will be assigned to administer the DBE program.

2. The ENGINEER is responsible for supervision of the DBE participation covered by the Contract.

#### DBE BID AND PERFORMANCE CONDITIONS

#### "Obligations"

The contractor, subcontractor, service provider, or supplier at any lower tier shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the DEPARTMENT deems appropriate.

#### "Assurances"

Each contract between the DEPARTMENT and the Contractor and each subcontract at any lower tier must include the following assurance:

The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the DEPARTMENT deems appropriate.

#### A. CONTRACT GOAL

- 1. The DEPARTMENT has determined that one or more Disadvantaged Business Enterprise (DBE) firms owned and controlled by the socially and economically disadvantaged individuals can reasonably be expected to compete for the work contained in the proposal for this project. It is, therefore, the goal of the DEPARTMENT that firms owned and controlled by the DBEs shall contract for the following percentage of work under this contract:
  - a. If the indicated DBE percent of the *CONTRACT DBE GOAL* is greater than 0.0%, complete Part A of the DBE BID ASSURANCE. Refer to Bidding Requirements, Section D, Subsection 1,a, of this Special Provision. (The commitment dollar amount up to the amount of the assigned goal is Race Conscious DBE participation. Any commitment dollar amount in excess of the assigned goal is Race Neutral Participation.)

b. If the indicated DBE percent of the *CONTRACT DBE GOAL* is 0.0% complete Part B of the DBE BID ASSURANCE. Refer to Bidding Requirements, Section D, Subsection 1,b, of this Special Provision. (Any commitment to a DBE is Race Neutral Participation.)

CONTRACT DBE GOAL: 5 Percent

#### 2. GOALS

#### a. GOAL FOR BID EVALUATION

The above entered DBE percentage is a goal for bid evaluation to determine responsiveness of the proposal as it relates to this specification. Percentages for bidding purposes shall be calculated using dollar values and quantities as shown in proposals received for this project. Bidders shall compute the percentage of their DBE commitment by dividing the dollar amount of subcontract work that is being committed to certified DBE firms by the total dollar amount of the proposal. This will be the percentage of their DBE commitment to be used by the Electronic Bidding System (EBS) software.

#### b. RACE CONSCIOUS GOAL

DBE participation on projects that are assigned a Goal for Bid Evaluation that is greater than 0.0% is *race conscious* and the DBE commitment becomes a contract specification upon award. The Bidder must submit with its Bid Proposal a *DBE Commitment*, prepared within the EBS software, that indicates:

- (1) Name of DBE firm
- (2) Work items to be performed
- (3) Total dollar amount of commitment

If the DBE commitment does not meet or exceed the assigned goal, the Bidder must submit with the Bid Proposal documentation of good faith efforts.

#### c. RACE NEUTRAL GOAL

DBE participation on projects that are assigned 0.0% Goal for Bid Evaluation is *race neutral* and does not become a contract specification upon award. The Bidder must take equal opportunity action to allow DBEs to compete for and perform on subcontracts. Only work classifications that the Bidder will subcontract need to be considered in evaluating equal opportunity action in the bid preparation. Contacts that have been made with DBE firms regarding potential work to be subcontracted and the

results of such contacts are to be submitted with the EBS prepared Bid Proposal in *Race Neutral DBE Documentation* which contains:

- (1) The work classifications that will be subcontracted.
- (2) DBE firms contacted.
- (3) Result of contact
- (4) Name of anticipated DBE subcontractor(s)
- (5) Anticipated work items to be performed by DBEs.
- (6) Anticipated dollar amount of subcontract(s).

#### **NOTE:** In the EBS (Electronic Bidding System):

Use the Quote Comparison to document item (1). Use the DBE Contact Log to document items (2) and (3). Use the DBE Commitment to document items (4), (5), and (6).

The *Race Neutral DBE Documentation* is required to document equal opportunity action and to assist UDOT with DBE reporting and DBE goal setting. Use the EBS functions in above NOTE as the Race Neutral DBE Documentation.

#### d. GOAL FOR CONTRACT PERFORMANCE

The Bidder's *DBE Commitment* becomes an attachment to the Bid Proposal and is a condition of award, and thereby becomes a contract specification. Upon award, this Race Conscious DBE Commitment also becomes the minimum goal for contract performance.

Commitments to DBEs that exceed the Goal for Bid Evaluation will be considered as both race conscious and race neutral. The dollar amount of the Goal for Bid Evaluation will be considered to be race conscious participation. Any dollar amounts in excess of the Goal for Bid Evaluation will be considered as race neutral participation.

It is the intent of this Special Provision that the DBE Firm(s) listed for *race conscious* participation, as a minimum level of participation, will perform to the extent indicated in the Bidder's DBE Commitment. The minimum level of DBE participation includes:

- (1) Indicated DBE firm(s),
- (2) Indicated work item(s) (bid items),
- (3) Indicated total dollar amounts.

Listed bid items shall be considered to be committed in their entirety unless Bidders designate otherwise in their DBE Commitment. If the DBE will perform only a part of the bid item, i.e., haul only, the Bidder must indicate

what part the DBE will perform (Partial Performance). If the DBE will perform only a part of the quantity of the bid item, the Bidder must indicate the estimated quantity of the work to be performed by the DBE (Partial Quantity).

Substitutions of DBE subcontractor(s), work item(s), or decreases of total dollar amount(s) as indicated in the Bidder's DBE Commitment will not be allowed without prior submission of written justification to the ENGINEER and approval of the ENGINEER and the Civil Rights Manager.

After award of a contract, substitutions will not be allowed without prior submission of a written "hold harmless" statement from the DBE.

Any change by the Contractor in the DBE Commitment requires that the change be approved by a Change Order.

Substitution of race neutral participation in excess of the Goal for Bid Evaluation requires equal opportunity efforts to substitute with other DBE participation.

DEPARTMENT generated decreases due to quantity changes in individual bid items do not require prior approval of the Civil Rights Manager—but must be fully justified by the ENGINEER at the conclusion of the project in the Explanation of Overruns and Underruns Statement. The ENGINEER's justification shall show the total estimated quantity, the final pay quantity as shown on the final estimate invoice, the quantity of the underrun, and the percent of underrun of the individual item. The explanation for the underrun shall include the reasons for the underrun and shall include as much detail as possible.

#### e. GOAL FOR FINAL COMPLIANCE

Percentages for final compliance shall be based on actual payments to DBEs. Overruns and under runs in individual contact items may require adjustments in the predetermined DBE percentage for a project if those items were not related to DBE performance. "The predetermined percentage for a project" refers to the percentage of the Contractor's DBE Commitment that becomes a contract specification upon award.

#### B. DEFINITIONS

For the purpose of this Special Provision, the following terms are defined:

- 1. <u>Contract</u> means a legally binding relationship obligating a seller to furnish supplies or services including but not limited to, construction and professional services) and the buyer to pay for them.
- 2. <u>Contractor</u> means one who participates, through a contract or subcontract (at any tier).
- 3. <u>Disadvantaged Business Enterprise or DBE</u> means a for profit small business concern.
  - a. That is at least 51 per cent owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which 51 per cent of the stock of which is owned by one or more such individuals; and
  - b. Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.
  - c. Whose size is limited to average annual gross receipts of \$17,425,000 over the previous three fiscal years. This amount may be adjusted for inflation from time to time by the Secretary of Transportation.

    OR

Whose size is limited to the current SBA Business size standard(s) found in 23 CFR part 121 appropriate to the type(s) of work the firm seeks to perform in DOT-assisted contracts.

d. That has been certified to DBE status by the DEPARTMENT.

#### 4. DBE Goals mean:

- a. UDOT's annual overall goal on DOT-assisted projects for Federal fiscal year 2003 is 8.0%.
- b. 3.3% of the overall goal is a race neutral goal and reflects the level of DBE participation that would be expected absent the effects of discrimination. There is an implied DBE goal on projects with no goals (0.0%) that have subcontracting opportunities. The implied goal is the percent achievable by equal opportunity efforts.
- c. 4.7% of the goal is a race conscious goal and reflects the level of DBE participation that will be achieved in response to assigned DBE goals.

- 5. <u>DBE Joint Venture</u> means an association of a DBE firm and one or more other firms to carry out a single, for profit business enterprise, for which the parties combine their property, capital, efforts, skills, and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture to a degree commensurate with its ownership interest.
  - A DBE joint venture must be approved by the DEPARTMENT's Civil Rights Office prior to bid opening in order to be utilized for the satisfaction of contract DBE goals. A DBE Joint Venture application must be submitted allowing ample lead time for the Civil Rights Office to review, evaluate, and verify information provided for in the application. An interview of the applicant may be necessary at the discretion of the DEPARTMENT prior to approval of the application. If an interview is deemed necessary it will be scheduled at the convenience of all parties.
- 6. <u>Equal Opportunity Action</u>. The principle of nondiscrimination requires that individuals be considered on the basis of individual capacities and not on the basis of any characteristics generally attributed to the group.
  - If a bidder requests or accepts bids for subcontract work, the bidder will request and accept bids from DBEs in the work classifications that potentially will be subcontracted.
- 7. Good Faith Efforts means efforts to achieve a DBE goal or other requirements of this part which by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the program requirements.
- 8. <u>Prompt Payment</u> means payment made no later than ten (10) work days after receipt of payment by the Contractor or Subcontractor, Service Provider or Supplier at any lower tier.
- 9. Race Conscious measure or program is one that is focused specifically on assisting only DBEs, including women-owned DBEs. UDOT must establish contract goals to meet any portion of its overall DBE goal that it does not project being able to meet using race neutral means. To ensure that the DBE program continues to be narrowly tailored to overcome the effects of discrimination, UDOT must adjust the use of contract goals as follows:
  - a. If during the course of any year it is determined that the overall goal will be exceeded, UDOT will reduce or eliminate the use contract goals to the extent necessary to ensure that the use of contract goals does not result in exceeding the overall goal.

- b. If it is determined that UDOT will fall short of its overall goal, then appropriate modifications in the use of race neutral and/or race conscious measures will be made to allow UDOT to meet the overall goal.
- 10. <u>Race Neutral</u> measure or program is one that is, or can be, used to assist all small businesses. UDOT must meet the maximum feasible portion if its overall DBE goal by using race -neutral means of facilitating DBE participation. Race neutral DBE participation includes:
  - a. Any time a DBE wins a prime contract through customary competitive procurement procedures
  - b. Is awarded a subcontract on a prime contract that does not carry a DBE goal
  - c. Is awarded a subcontract from a prime contractor that did not consider its DBE status in making the award even if there is a DBE goal.

For the purposes of this part, race-neutral includes gender-neutrality.

#### 11. <u>Regular Employee</u> is a person who:

- a. Would be working for the DBE firm on any other subcontract with any other contractor.
- Is a permanent employee of the DBE firm
   Or
   Has been recruited through the traditional recruitment and/or employment centers
- c. Has not recently been employed by the prime contractor on the present project, another subcontractor on the present project, or the renter-lessor of equipment being used on the present project.
- d. Is not a member of a construction crew which regularly works for a non-DBE.
- e. Is not a licensed contractor who is at the time "unemployed" or "between jobs."

- 12. <u>Regular Equipment</u> is owned or leased and operated on a long term agreement and not on an *ad hoc* or contract by contract agreement.
  - a. The equipment would be used by the DBE firm on any other subcontract with any other contractor.
  - b. The equipment would be owned by the DBE firm.

Or

The equipment would be leased/rented from traditional equipment lease/rental sources.

- c. The DBE firm would have a rental/lease agreement for any rented or leased equipment.
- d. The equipment cannot belong to:
  - (1.) Prime Contractor
  - (2.) Another subcontractor on the present project.
  - (3.) Supplier of materials being installed by the DBE firm.
- e. The equipment <u>cannot</u> come from another contractor fully operated.

#### 13. Reasonable Bid

This is a bid the DEPARTMENT would accept if it were the only bid submitted. Generally, this is a bid within 10% of the Engineer's Estimate.

## 14. Responsible Bidder

A responsible bidder has the apparent ability and capacity to perform the contract requirements. In addition to normal prequalification, a responsible bidder is defined as one who has signed (manually or electronically) and submitted with the bid the DBE Bid Conditions Assurance of good faith effort included as Part I of this Special Provision certifying the intention to meet the DBE goal of a proposed contract or to continue good faith effort to do so. These goals may be met by subcontracting or leasing contracts with a DBE or purchasing material from a DBE insofar as the work or material becomes a part of a proposed contract.

#### 15. <u>Responsive Bidder</u>

a. A responsive bidder is a bidder who unequivocally offers to provide services or supplies in conformity with the material terms of the solicitation. In addition to normal prequalification and other bidding requirements, a responsive bidder in relationship to this Special Provision is defined as one who submits evidence of proposed subcontract performance with certified DBE firms to achieve the required dollar amount necessary to achieve the percentage goal.

b. Bidders may be considered as presumptively responsive if they have failed to satisfy the advertised DBE goal set for the proposed contract but have certified in their bid that good faith efforts have been expended to meet the goal and that they will continue during the performance of the contract to locate, solicit, and involve DBE firms in contract performance. Documentation of the bidder's good faith efforts must be included with the bid package of the DEPARTMENT's review and assessment. Failure to do so shall render the bid non-responsive. The bid will be rejected by the DEPARTMENT.

#### 16. Satisfactory Completion of a subcontract occurs when:

- a. The work has been satisfactorily completed in all respects under the Contract.
- b. The Contractor and the subcontractor have notified the ENGINEER in writing that the work of the subcontractor has been completed.
- c. The Engineer will be given a reasonable length of time to check quantities if necessary. Checking quantities does not guarantee the absolute correctness of quantities.
- d. The Contractor and the subcontractor have satisfactorily executed and delivered to the ENGINEER all documents, certificates and proofs of compliance required by the Contract. The satisfactory execution and delivery of these documents, certificates and proofs of compliance to the ENGINEER is a material requirement of the contract.
- e. The work of the subcontract is accepted in writing by the ENGINEER.
- f. Satisfactory Completion refers only to payment of retainage and accrued interest. A determination of Satisfactory Completion and payment in full for work performed does not relieve the contractor nor the subcontractor from any contractual obligation.
- 17. <u>Satisfactory Performance</u> means work performed and materials furnished in conformity with the plans and specifications.
- 18. <u>Service Provider</u> means a broker or a middle man. A businessperson who buys or sells for another in exchange for a commission.
- 19. <u>Socially and Economically Disadvantaged Individuals</u> means any individual who is a citizen (or lawful admitted permanent resident) of the United States and who is:

- a. Any individual who the DEPARTMENT finds to be a socially and economically disadvantaged individual on a case-by-case basis.
- b. Any individual in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged:
  - (1) "Black Americans," which includes persons having origins in any of the black racial groups of Africa;
  - (2) "Hispanic Americans," which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American or other Spanish or Portuguese culture or origin, regardless of race;
  - (3) "Native Americans," which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians;
  - (4) "Asian-Pacific Americans," which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S.Trust Territories of the Pacific Islands, (Republic of Palau), the Commonwealth of the Northern Mariana Islands, Macao, Fiji, Tonga, Kirbati, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong;
  - (5) "Subcontinent Asian Americans," which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka.
  - (6) Women.
  - (7) Any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.

#### 20. Subcontractor

A subcontracting arrangement is generally considered to exist when a person or firm assumes an obligation to perform a part of the contract work and the following conditions are present.

- a. The person or firm performing the work is particularly experienced and equipped for such work.
- b. Compensation is related to the amount of work accomplished rather than being on an hourly basis.
- c. Choice of work methods, except as restricted by the specifications, and the furnishing and controlling of labor and equipment are exercised by the subcontractor with only general supervision being executed by the prime contractor.
- d. Personnel involved in the operation are under the direct supervision of the subcontractor and are included on the subcontractor's payroll.

All conditions involved shall be considered and no one condition alone will normally determine whether a subcontract actually exists. In all cases, a DBE subcontractor must be an independent organization, and the ownership and control by the socially and economically disadvantaged individual(s) must be real and continuing. The prime contractor, a subcontractor, or a supplier shall not be responsible for the various operating and management activities of a DBE firm.

## 21. Supplier

Provides or furnishes materials, goods or services that may be incorporated into the project. The supply transaction is to be documented by an appropriate purchase agreement which includes the required provisions for Federal-aid construction projects.

# C. <u>DETERMINATION OF DBE CONTRACTOR'S ELIGIBILITY BY THE DEPARTMENT</u>

- 1. Any Contractor may apply to the DEPARTMENT for status as a DBE. Applications shall be made on forms provided by UDOT entitled "UTAH DEPARTMENT OF TRANSPORTATION APPLICATION FOR DETERMINING DISADVANTAGED BUSINESS ENTERPRISE (DBE) ELIGIBILITY, SCHEDULE A UDOT FORM R-816" or "Information for Determining DBE Joint Venture Eligibility," Form No. R-817. Application need not be made in connection with a particular bid. Only work contracted to certified DBE prime contractors or subcontractor to firms that have applied for and have been granted status as a DBE by the DEPARTMENT shall be considered toward contract goals as established in Subsection A.
- 2. It shall be the Contractor's responsibility to submit a DBE application so that the DEPARTMENT has time to review it. The DEPARTMENT will review applications in a timely manner but is not committed to approve DBE status within any given period of time. The Civil Rights Office must have ample lead time to review, evaluate, and verify information provided with a application.
- 3. The DEPARTMENT shall maintain a directory of DBE Contractors, vendors, service providers and suppliers that is updated as changes occur for the purpose of providing a reference source to assist any bidder in meeting the requirements of this bid condition. Bidders must use the most current DBE information available on the web site when submitting bids. A current DBE directory representing approved DBE Contractors is available through the UDOT Civil Rights Office, and also on the Internet at (click on this link):

http://www.udot.utah.gov/cns/Civil Rights/dbedir.pdf

An electronic file of the DBE Directory is available for downloading to use in the Electronic Bidding System (EBS) at the following URL (click on this link):

## www.udot.utah.gov/cns/bidopeninfo.htm

4. In meeting the requirements of this bid condition, bidders are in no way limited to the DBE Directory referred to in 3 above in seeking out and negotiating with the DBE Contractors and determining which items of work shall be subcontracted to DBE Contractors. Bidders shall exercise their own judgments in selecting any subcontractor to perform any portion of the work.

DBE status must be granted to any DBE Contractor or DBE Joint Ventures by the DEPARTMENT prior to bid opening. DBE credit will not be allowed toward *race conscious* goals for a firm or joint venture that has not been DBE certified by the DEPARTMENT.

#### D. BIDDING REQUIREMENTS

All bidders must satisfy the bidding requirements of this part. A DBE prime contractor's performance does not count toward fulfilling the DBE goal. A prime bidder who is a DBE contractor shall meet the DBE goal by using DBE subcontractors or by using good faith efforts.

#### 1. DBE Bid Assurance

a. Race Conscious Goal

For a bid with a DBE goal greater than 0.0% to be considered responsive, *Part* A of the DBE Bid Assurance must be completed and included in the BID PROPOSAL, certifying that they will meet or exceed the Goal for Bid Evaluation established in Subsection A, or that they fail to meet the goal but have and will put forth good faith effort to meet or exceed the goal of the DBE program. *Part A* of the DBE Bid Assurance will be completed by the EBS software based upon the entry of the DBE Commitment and/or the Good Faith Documentation into EBS. In either event, the Contractor shall continue efforts to consider and utilize DBE firms during the performance of the contract.

b. Race Neutral Goal

For a bid with a DBE goal of 0.0% to be considered responsive, *Part B* of the DBE Bid Assurance must be included in the BID PROPOSAL certifying that the Bidder has utilized equal opportunity action to allow DBE's to compete for and perform on subcontracts. *Part B* of the DBE Bid Assurance will be completed based upon the following information entered into EBS:

## (1) Bids with no subcontracting opportunities

Bidders who intend to do all the work with their own organization will indicate this in EBS on the Bid Submission Checklist and Forms window. EBS will subsequently indicate on Part B of the DBE Bid Assurance that the Bidder does not intend to sublet a portion of the contract work.

After the award of the bid, in the event that a Contractor indicates that he does not intend to sublet any work and subsequently determines to sublet a portion of the work, the Contractor:

- (a) must justify why subcontract quotes were not a part of the Bid Proposal,
- (b) must utilize equal opportunity action to allow DBEs to compete for and perform on the work to be sublet,
- (c.) must submit the required Race Neutral Documentation with the proposed subcontract.

NOTE: The Contractor may use the 'DBE Contact Log' and 'Quote Comparison' functions in EBS to develop the above requirements for documentation.

### (2) Bids with subcontracting opportunities

Race Neutral measure or program is one that is, or can be, used to assist all small businesses. UDOT must meet the maximum feasible portion if its overall DBE goal by using race -neutral means of facilitating DBE participation.

Bidders who solicit non-DBE subcontract quotes will utilize equal opportunity action to allow DBEs to compete for and perform on subcontracts. If the Bidder has selected 'Intend to Sublet' on the 'Bid Submission Checklist and Forms' window in the EBS software, Part B of the DBE Bid Assurance will indicate that the Bidder intends to sublet a portion of the contract work.

The results of the equal opportunity actions will be included with the EBS prepared Bid Proposal as a *Race Neutral Documentation*. Part B of the Bid Assurance Form will indicate the existence of any of the following types of Race Neutral Documentation that the Bidder has entered into EBS:

- (a) DBE Commitment
- (b) DBE Contact Log
- (c) Quote Comparison

In either event, the Contractor shall continue efforts to consider and utilize DBE firms during the performance of the contract.

#### 2. DBE Commitment

For a bid to be considered responsive, Bidders shall submit the following information regarding DBE compliance with the EBS prepared Bid Proposal:

Submit a DBE Commitment of work that will be subcontracted to certified DBE firm(s) as listed in the DEPARTMENT's <u>Disadvantaged Business Enterprise</u> <u>Directory</u> or DBE firms that have been approved by the DEPARTMENT prior to bid opening.

- a. The names of DBE firms that will participate in the contract;
- b. A specific description of the work each named DBE firm will perform (list specific bid items). Listed bid items shall be considered to be committed in their entirety unless Bidders designate otherwise in their DBE Commitment.
  - (1) If mobilization is a bid item that is partially committed to a DBE, indicate the dollar amount of the DBE mobilization.
  - (2) If a partial quantity is committed to a DBE, indicate the quantity committed to the DBE.
  - (3) If a partial performance of an item is committed to a DBE, explain what part of the item the DBE will perform;
- c. The dollar amount of participation by each named DBE firm;
- d. If the contract goal is not met, evidence of good faith efforts.

The DBE Commitment is to be included in the bid prepared within, and said information will be kept confidential and will not be reviewed unless the Contractor is otherwise determined to be the low Bidder or the DEPARTMENT elects to review said information in making its determination as to award of the contract.

#### 3. Race Neutral Commitment

For a bid to be considered responsive, Bidders shall submit the following information regarding equal opportunity compliance with their EBS prepared Bid Proposal:

Submit a Race Neutral DBE Commitment of work that will be subcontracted to certified DBE firm(s) as listed in the DEPARTMENT's <u>Disadvantaged Business</u> <u>Enterprise Directory</u> or DBE firms that have been approved by the DEPARTMENT prior to bid opening. The DBE Commitment will include:

a. The bid item(s) or work classification(s) that will be subcontracted;

- b. The DBE firms that have been contacted. A reasonable number of DBEs available to perform the anticipated subcontract work must be contacted. The DBE firms must be given a reasonable amount of time to develop subcontract quotes.
- c. The results of the contacts with the DBE firms
- d. Name(s) of anticipated DBE subcontractor(s)
- e. Anticipated work items to be performed by DBE(s)
- f. Anticipated dollar amount of subcontract(s).

A specific description of the work each named DBE firm will perform (list specific bid items). Listed bid items shall be considered to be committed in their entirety unless Contractors designate otherwise in their DBE commitment.

- (1) If mobilization is a bid item that is partially committed to a DBE, indicate the dollar amount of the DBE mobilization.
- (2) If a partial quantity is committed to a DBE, indicate the quantity committed to the DBE.
- (3) If a partial performance of an item is committed to a DBE, explain what part of the item the DBE will perform;

#### **NOTE:** In the EBS (Electronic Bidding System):

Use the quote comparison to document item (a)
Use the contact log to document items (b) and (c).
Use the DBE commitment to document items (d), (e), and (f).

The *Race Neutral Documentation* submitted in the EBS prepared bid, will be kept confidential and not reviewed unless the Contractor is otherwise determined to be the low Bidder or the DEPARTMENT elects to review said information in making their determination as to award of the contract.

#### 4. DBE Written Confirmation

Low Bidder shall submit to the Director of Construction & Materials within three (3) work days after the bid opening written confirmation from each DBE that it is participating in the contract as provided in the Prime Contractor's DBE Commitment or Race Neutral Documentation. The written confirmation shall include the following information:

a. A description of the work that will be performed (list specific bid items).
 Listed bid items shall be considered to be committed in their entirety unless
 Contractors designate otherwise in their DBE commitment.

- (1) If mobilization is a bid item that is partially committed, please confirm the dollar amount of the mobilization to be performed.
- (2) If a partial quantity is committed, confirm the quantity to be performed.
- (3) If a partial performance of an item is committed, confirm what part of the item will be performed.
- (4) Unit bid prices for each bid item that is committed to a DBE.
- (5) Total dollar amounts (mathematical extensions) for each bid item that is committed to a DBE
- b. The dollar amount of participation by each named DBE firm.

#### 5. Good Faith Efforts

Bidders who fail to meet the DBE goal for bid evaluation must demonstrate with documentary evidence that they made good faith efforts to do so. Bidders are required to include the Good Faith Efforts Documentation with the EBS prepared Bid Proposal. The said information will be kept confidential and not reviewed unless the Bidder is otherwise determined to be the low Bidder or UDOT and authorized representatives elect to review said information in making their determination as to award of the contract. For the bid to be considered responsive, Bidders shall include with the BID PROPOSAL specific documentary evidence that good faith efforts have been made to meet the goal.

Attached hereto and marked Exhibit A, and by this reference made a part hereof, is a list of actions that may be used to prove the kinds of efforts prospective Bidders should consider in their attempts to demonstrate good faith efforts. The list of actions, as contained in Exhibit A, is not intended to be an exclusive list of efforts that a prospective Bidder may wish to consider in demonstrating good faith efforts to satisfy DBE participation requirements. The determination of good faith efforts shall be based upon the information and documentation of the actions supplied by the Bidder with the bid proposal. The DEPARTMENT reserves the right to investigate and verify such information or to request the low dollar Bidder to clarify information submitted at the time of bid.

#### 6. Award of the Contract

The award of the contract, if awarded, will be made to the apparent successful responsive, responsible Bidder who submitted a reasonable bid for the contract and has complied with this Subsection D.

#### 7. Administrative Reconsideration

Good faith efforts as used herein shall be determined on a case by case basis. If it is determined that the apparent low Bidder has failed to meet the requirements of Exhibit A, the bidder will be provided an opportunity for administrative reconsideration.

- a. The reconsideration will be made by an official who did not take part in the original determination.
- b. The Bidder will have the opportunity to provide to written documentation or argument concerning the issue of whether it met the goal or made adequate good faith efforts to do so.
- c. The Bidder will have the opportunity to meet in person with the reconsideration official to discuss the issue of whether it met the goal or made adequate good faith efforts to do so.
- d. The Bidder will be notified in writing of the decision and the basis for the decision.
- e. The reconsideration decision is administratively final and is not appealable to FHWA nor to the DOT.

#### E. COUNTING DBE PARTICIPATION TOWARD GOALS FOR BID EVALUATION

1. The DEPARTMENT will recognize and grant DBE credit toward the goal for bid evaluation (*race conscious* goals) for work committed to DBE subcontractors ONLY in the types of work for which DBE certification has been granted by the DEPARTMENT prior to bid opening. It is necessary that all bidders refer to the DEPARTMENT's Disadvantaged Business Directory for direction and guidance. A current copy of the DBE directory is available through the Civil Rights Office and on the Internet at (click on this link):

## www.udot.utah.gov/cns/Civil Rights/dbedir.pdf

An electronic file of the DBE Directory is available for downloading to use in the Electronic Bidding system (EBS) at the following URL (click on this link):

#### www.udot.utah.gov/cns/bidopeninfo.htm

2. The DEPARTMENT will grant DBE credit toward *race neutral* goals for work performed by firms who are not DBE certified prior to bid opening or who bid types of work for which DBE certification has not been granted by the DEPARTMENT prior to bid opening but subsequently are granted DBE certification.

3. Commitments to DBEs that exceed the Goal for Bid Evaluation will be considered as both race conscious and race neutral. The dollar amount of the Goal for Bid Evaluation will be considered to be race conscious participation. Any dollar amounts in excess of the Goal for Bid Evaluation will be considered as race neutral participation.

#### F. COUNTING DBE PARTICIPATION TOWARD GOALS FOR PERFORMANCE

Subcontracts to DBEs that exceed the *Goal For Bid Evaluation* will be considered in part as race conscious participation and in part as race neutral participation. Any dollar amounts in excess of the *Goal For Bid Evaluation* will be considered as race neutral participation.

It is intended that the Contractor shall utilize the subcontractors designated in the DBE Commitment in the performance of the contract. Any changes in the Contractor's DBE Commitment, such as substitution of a DBE subcontractor, substitution of contract items, or decrease in total dollar amount must be approved by the DEPARTMENT and must be covered by a Change Order. Unauthorized substitutions or eliminations may result in the imposition of sanctions. Failure to meet the Goal for Performance, that is established at the time of award by the Contractor's DBE Commitment, without adequate justification, including concurrence of the ENGINEER and Civil Rights Manager, shall result in the imposition of sanctions as provided in Part I of this Special Provision.

- 1. Only the value of the work actually performed by the DBE will count toward DBE goals.
- 2. Contractors may count toward their contract goals a portion of the total dollar value of a contract with a joint venture eligible under the standards of this bid condition equal to the percentage of the ownership and controls of the DBE partner in the joint venture.
- 3. The ENGINEER will recognize and grant DBE credit for work subcontracted and performed by DBE subcontractors <u>ONLY</u> in the types of work for which DBE certification has been granted by the ENGINEER prior to bid opening. It is necessary that all Bidders refer to DEPARTMENT's Disadvantaged Business Directory for direction and guidance. A current copy of the DBE directory is available through the Civil Rights Office and on the Internet at (click on this link):

http://www.udot.utah.gov/cns/Civil Rights/dbedir.pdf

An electronic file of the DBE Directory is available for downloading to use in the Electronic Bidding system (EBS) at the following URL (click on this link):

www.udot.utah.gov/cns/bidopeninfo.htm

- 4. Contractors may count toward their goals only the value of the work actually performed by the DBE toward the DBE goals.
  - a. Work performed by the DBE's own forces using "regular employees and "regular equipment."
  - b. The cost of supplies and materials obtained and purchased by the DBE and equipment leased for the work of the contract.
  - c. Work that a DBE subcontracts to a lower tier DBE firm.
- 5. Contractors may not count toward the DBE goals:
  - a. Supplies and material purchased and equipment leased by the DBE from the prime Contractor or its affiliates or another subcontractor on the project.
  - b. Work that a DBE subcontracts to a lower tier non-DBE firm.
- 6. Contractors may count toward their goals only expenditures to a DBE that performs a commercially useful function in the work of the contract.
  - a. A DBE performs a "commercially useful function" when it is responsible for the execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself.
  - b. The DEPARTMENT shall evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.
  - c. A DBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is such an extra participant, the DEPARTMENT must examine similar transactions, particularly those in which DBEs do not participate.

- d. A DBE does not perform a commercially useful function if it does not perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own work force, or the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved.
- 7. The DEPARTMENT shall use the following factors in determining whether a DBE trucking company is performing a commercially useful function:
  - a. The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract and there cannot be a contrived arrangement for the purpose of meeting DBE goals.
  - b. The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the contract.
  - c. The DBE receives credit toward the DBE goals for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.
  - d. The DBE may lease trucks from another DBE firm, including an owneroperator who is certified a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
  - e. The DBE may lease trucks from a non-DBE, including an owner-operator. The DBE does not receive credit for the total value of the transportation provided by the lessee, because the services are not provided by a DBE. Only the fee or commission received by the DBE counts toward the DBE goals.
  - f. For purposes of this part (7), a lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.
- 8. Contractors may count expenditures with DBEs for materials or supplies as provided in the following:
  - a. If the materials or supplies are obtained from a DBE manufacturer, 100 percent of the cost of the materials or supplies counts toward DBE goals.

For purposes of this paragraph, a manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.

b. If the materials or supplies are purchased from a DBE regular dealer, 60 percent of the cost of the materials or supplies counts toward DBE goals.

For purposes of this paragraph, a regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

- (1) To be a regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.
- (2) A firm may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating or maintaining a place of business if the firm both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease agreement and not on an *ad hoc* or contract-by-contract basis.
- (3) Packagers, brokers, manufacturers representatives, or other persons or firms who arrange, or expedite, transactions are **not** regular dealers.
- (4) A DBE trucking company that picks up a product from a manufacturer or regular dealer and delivers the product to the Contractor performs a delivery service. Credit will **not** be given based on a percentage of the cost of the product; credit will be allowed only for the cost of the transportation service.
- 9. If the materials or supplies are purchased from a service provider, the fees or commission charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies, count toward the DBE goals.

A Service Provider is a business which is neither a manufacturer nor a regular dealer but simply transfers title of a product from manufacturer to ultimate purchaser or a firm that puts a product into a container for delivery.

a. Only the fees, commissions, or transportation performed by the DBE service provider count toward the DBE goals.

b. No portion of the cost of the materials and supplies count toward the DBE goals.

Documentary evidence of the supply agreements, i.e., sales contract, purchase order, etc., shall be submitted to the Resident Engineer or Consultant Engineer at the Preconstruction Conference. The agreement shall set forth the estimated quantities, unit prices, total dollar amounts, material guarantees, delivery, and payment requirements including the requirements listed part E, 4, e, of this DBE Special Provision.

10. Prompt payment for the work accomplished is an integral part of the concept of commercially useful function.

See Section F, Subsection 6,a for a definition of "commercially useful function."

#### G. CONTRACTOR'S RESPONSIBILITY

- It is the Contractor's responsibility to determine the level of professional competence and financial responsibility of any proposed DBE subcontractor. The Contractor shall ascertain that the proposed DBE subcontractor is particularly experienced and equipped for the work of the subcontract.
- It is the Contractor's responsibility to monitor and assure that DBE's listed to fulfill DBE goals perform a commercially useful function.

#### H. DBE SUBCONTRACTOR'S FAILURE TO PERFORM SUCCESSFULLY

If, during the performance of the contract, the Prime Contractor determines that a DBE subcontractor is unable to perform successfully, the Contractor shall make good faith efforts to replace the DBE subcontractor with another DBE to fulfill the Goal for Bid Evaluation. For Race Conscious DBE participation, the Contractor shall consider the uncompleted DBE committed work items as well as other work items as a part of the good faith efforts. All substitutions of DBE subcontractors shall receive prior approval by the DEPARTMENT.

The Contractor shall not substitute DBE subcontractor(s), work item(s), nor decrease dollar amount(s) as indicated in the Contractor's DBE Commitment without prior submission of written justification to the ENGINEER and without prior approval of the ENGINEER and the Civil Rights Manager.

The Contractor shall not substitute DBE subcontractor(s), work item(s), nor decrease dollar amount(s) as indicated in the Contractor's DBE Commitment Substitutions without prior submission of a written statement from the DBE consenting to the substitution or decrease and holding the ENGINEER harmless for approving the substitution.

Unauthorized substitutions of the DBE(s), underruns of work item(s), or decreases in dollar amount(s) may result in the imposition of sanctions as allowed under Section I.

UDOT reserves the right to authorize completion of the work that was subcontracted to a DBE who is unable to perform successfully by either of the following methods:

- 1. Approve, at no additional cost to the DEPARTMENT, a replacement DBE subcontractor and, when appropriate, modify the contract to provide for reasonable extra time necessary to obtain a DBE replacement at no additional cost to the DEPARTMENT.
- 2. Direct the Contractor to perform at unit bid prices. In the event this option is selected, the percentage DBE goal will be adjusted as may be appropriate.

#### I. SANCTIONS

1. The Contractor's DBE Commitment becomes a 3 part commitment comprised of the DBE Contractor(s), work item(s) and dollar amount(s). The Commitment becomes a contract specification upon award of the contract and becomes the minimum goal for contract performance.

If the Contractor fails to achieve the minimum goal, established in the contract at the time of the award of the contract or later modified, the contract payments shall be reduced as a liquidated damage and not as a penalty by an amount equal to the dollar amount of work not performed by the DBE. The dollar amount of any sanction will be computed using the unit prices indicated in the DBE subcontract

### **Exceptions:**

- a. Any authorized adjustment in the DBE Commitment that has been approved by the ENGINEER and Civil Rights Manager.
- b. Race neutral participation.

2. The ENGINEER shall deduct maximum points for *Compliance with EEO* when completing the *Contract Performance Report*.

#### J. RECORD KEEPING

- 1. DBEs shall maintain records of payment received under this bid condition. DBEs shall submit to the ENGINEER within 10 work days after receipt copies of progress payments received from the prime Contractor or subcontractor if the DBE is a lower tier subcontractor:
  - a. For each committed bid item:
    - (1) The quantity committed toward the DBE goal
    - (2) The quantity performed by the DBE to the date of the payment
  - b. Total dollar amount earned to the date of the payment
  - c. The total amount paid to the date of the payment.
- 2. The Contractor shall maintain records of payment under this bid condition. At the completion of the project, the Contractor will submit to the ENGINEER a certificate in the form of an affidavit for each DBE firm participating on the Project. The Affidavit will be in the form of a spread sheet and will include for each committed DBE subcontractor:
  - a. For each committed bid item:
    - (1) The quantity committed toward the DBE goal
    - (2) The total quantity performed on the project
    - (3) The quantity performed by the DBE
    - (4) The dollar amount paid to the DBE
  - b. Total dollar amount committed toward the DBE goal
  - c. Total dollar amount earned
  - d. Interest earned from escrow and from late payment`
  - e. The total amount paid
  - f. The dollar amount of money retained.

If it appears that the DBE goals will not be met, the Contractor's retained amount may not be reduced to one and one half percent. The DEPARTMENT shall retain necessary funds until the Contractor complies with this contract specification.

DBE firms listed in the original DBE Commitment or later modified with the DEPARTMENT approval shall be paid in full prior to the DEPARTMENT processing the final payment. The Contractor shall submit with the signed, final estimate invoice, a certificate in the form of an affidavit listing all DBEs that engaged in this contract and report the total dollar amount paid to each. The affidavit(s) must be submitted to the DEPARTMENT on the Contractor's letterhead and must be dated and signed by a responsible official legally representing the Contractor.

- 3. The DEPARTMENT must create and maintain a Bidders list consisting of all firms bidding on prime contracts and bidding or quoting subcontractors on DOT-assisted projects. For every firm, the following information must be submitted annually:
  - a. Firm name
  - b. Firm address
  - c. Firm's status as a DBE or non-DBE
  - d. Age of firm
  - e. Annual gross receipts of the firm.

Every firm bidding or quoting as a prime or subcontractor at any level on DOT-assisted projects must register annually with UDOT.

# NOTE: Items (a) and (b) should be completed in the EBS software by using the 'Quote Comparison' and submitted with your bid.

- 4. With the bid or no later than 10 work days after bid opening date, each and every prime bidder must submit to The DEPARTMENT a list of all firms bidding and/or quoting as subcontractors, service providers or suppliers.\* The Prime Bidder must also submit for each and every firm sub-quoting the following information:
  - a, Firm Name
  - b. Firm address
  - c. Work classification(s) bid by subcontractor, service provider or supplier:
    - (1) Building
    - (2) Concrete Miscellaneous and flatwork, etc.
    - (3) Concrete Structural
    - (4) Demolition
    - (5) Electrical
    - (6) Engineering Consultants
    - (7) Engineering Design

- (8) Equipment Purchases
- (9) Equipment Rentals
- (10) Excavation
- (11) Fence
- (12) Grading
- (13) Guardrail
- (14) Hauling Earth or Other Materials
- (15) Landscaping
- (16) Lighting
- (17) Miscellaneous
- (18) Painting Striping & Messages
- (19) Painting Structural
- (20) Paving Asphalt, Highway
- (21) Paving Concrete
- (22) Paving Miscellaneous
- (23) Paving Rotomilling
- (24) Pipe Culverts
- (25) Reconstruction
- (26) Saw & Seal
- (27) Signs Permanent
- (28) Signs Temporary or traffic control
- (29) Steel Reinforcing
- (30) Steel Structural
- (31) Supplier Manufacture
- (32) Supplier Regular Dealer
- (33) Supplier Service Providers
- (34) Surveying
- (35) Traffic Signals

\*NOTE: This requirement can be met with the 'Quote Comparison' function in EBS. The report must be printed and faxed to the Civil Rights Department at (801) 965-4101.

### K. PROMPT PAYMENT

THIS SECTION APPLIES TO ALL PRIME CONTRACTORS, ALL SUBCONTRACTORS, AND ANY LOWER TIER SUBCONTRACTORS, AND ALL SUPPLIERS. Refer to CFR 49 Part 26.29

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

This Section applies to prime Contractors, all subcontractors, all service providers and all material suppliers, and any lower tier subcontractors, service providers, and suppliers.

# 1.2 PROMPT PAYMENT TO SUBCONTRACTORS, MATERIAL SUPPLIERS AND SERVICE PROVIDERS - PROGRESS PAYMENTS

- A. Include in subcontract, service or purchase agreement language agreeing to pay as promptly as or sooner than required by this specification.
- B. Pay subcontractor, service provider, or material supplier for satisfactory performance of the subcontract, service or material supply agreement no later than 10 work days after receipt of payment.
- C. Submit to the Engineer within 5 work days after paying subcontractor(s), service providers, or material supplier(s), a certified payment statement in the form of an affidavit certifying that the total dollar amount paid to each subcontractor, service provider or supplier that the payment has been made promptly, and that the dollar amount paid is the total amount due for work or services performed or materials purchased during the pay period. Contractor is required to submit the affidavit on Contractor's letterhead and include the signature of a responsible official legally representing the Contractor.

# 1.3 PAYMENT TO SUBCONTRACTORS, SUPPLIERS AND SERVICE PROVIDERS – RETAINED MONEY AND ACCRUED INTEREST

- A. Include in subcontract, service or purchase agreement language agreeing to pay retained money and accrued interest upon satisfactory completion of the work of subcontract, service or purchase agreement.
- B. Pay retained money and accrued interest to subcontractor, service or material provider no later than 25 work days after satisfactory completion of the work of subcontract. service or purchase agreement.
- C. Payment of retained money and accrued interest must be paid even if the Contractor has not received payment from the Department.

- D. Submit to the Engineer within 5 work days after paying subcontractor, supplier, or service provider a certified payment statement in the form of an affidavit certifying that the total amount paid is the total amount of retained money and interest due to the subcontractor, service provider or supplier. Provide a signed affidavit by a responsible official legally representing the Contractor, on Contractor's letterhead.
- E. A determination of satisfactory completion and payment of retained money and accrued interest does not relieve the Contractor, subcontractor, service provider nor supplier from any contractual obligation.

#### 1.4 DELAY OF PAYMENT

- A. Delay payment to subcontractor, service provider, or supplier, only for good cause, with prior written notice to subcontractor, service provider or supplier and with prior written approval of the Engineer.
- B. Give subcontractor, service provider or supplier time to correct deficiencies before estimated cut-off date.
- C. Not giving notice to subcontractor, service provider, or supplier nor receiving written approval from Engineer will be considered as implied consent to pay promptly.
- D. Engineer withholds from progress payment, delayed payments.
- E. Include in subcontract, service and supply agreements, language providing for the use of appropriate alternative dispute resolution mechanisms to resolve payment disputes.
- F. Department holds in escrow disputed funds until the dispute is resolved.

## 1.5 PENALTIES FOR FAILURE TO MAKE PROMPT PAYMENT

- A. Department will not reimburse for work performed by subcontractors, service providers nor materials delivered by suppliers unless and until the Contractor ensures that subcontractors, service providers and suppliers are promptly paid for work performed or materials delivered.
  - 1. Engineer deducts the dollar amount due but not paid to subcontractor, service provider or supplier from the next progress payment.
  - 2. Engineer may deduct an equal amount from the Contractor's payment.
- B. Department considers the failure to pay promptly an indication of a lack of financial fitness.
  - 1. Forfeit the privilege of bidding on the Department's projects as a prime Contractor until subcontractors, service providers or suppliers are paid.

- 2. Forfeit the privilege of having a subcontract, supply or purchase agreement approved to perform as a subcontractor, service provider or supplier on the Department's projects until subcontractors, service providers or suppliers are paid.
- C. Department employs other mechanisms, consistent with this part and applicable state and local law, to ensure that DBEs, other Contractors, service providers and suppliers are fully and promptly paid.

#### 1.6 OVERPAYMENT BY ENGINEER

- A. If the Engineer overpays for work or services performed or materials delivered, the Department deducts the dollar amount of the overpayment from future payments to the Contractor.
- B. The subcontractor, service provider or supplier is responsible to keep records and to know the quantity of work or services performed or materials delivered. If overpayment is made to a subcontractor, service provider or material supplier, the subcontractor, service provider or material supplier immediately notifies the Contractor and the Department of the overpayment.
- C. If prompt payment results in overpayment, the subcontractor, service provider or supplier promptly repays the Contractor the amount of the overpayment. If prompt repayment is not made to the Contractor, the prompt payment penalties of this specification applies to subcontractor or supplier.

#### Exhibit A

# Suggested Actions and Required Documentation to Demonstrate Good Faith Efforts to Comply With DBE Requirements

A Bidder must show that it took necessary and reasonable steps to achieve a DBE goal which, by their scope, intensity, and appropriateness, can reasonably be expected to fulfill the program requirement. The efforts employed should be those that would be taken if a Bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract. Goal. Mere *pro forma* efforts are not good faith efforts to meet the DBE contract requirements.

Documentary evidence of each action taken must be submitted with the Bid Proposal.

The following is taken, with some modification, from CFR 49 Part 26, Appendix A. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive.

#### **GUIDANCE CONCERNING GOOD FAITH EFFORTS**

- I. When the DEPARTMENT establishes a contract goal on a Federal aid contract, a Bidder must, in order to be responsive, make good faith efforts to meet the goal. The Bidder can meet this requirement in either of two ways:
  - A. The Bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose.
  - B. If it doesn't meet the goal, the Bidder can document adequate good faith efforts. This means that the Bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful.
- II. In any situation in which the DEPARTMENT has established a contract goal, CFR 49, Part 26 requires UDOT to use the good faith efforts mechanism of this part. It is up to the DEPARTMENT to make a fair and reasonable judgment whether a Bidder that did not meet the goal made adequate good faith efforts. It is important for the DEPARTMENT to consider the quality, quantity, and intensity of the different kinds of efforts that the Bidder has made. The efforts employed by the Bidder should be those that one could reasonably expect a Bidder to take if the Bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. The DEPARTMENT emphasizes, however, that its determination concerning the sufficiency of the firm's good faith efforts is a judgment call: meeting quantitative formulas is not required.
- III. The U. S. Department of Transportation also strongly cautions the DEPARTMENT against requiring that a Bidder meet a contract goal (i.e., obtain a specified amount of DBE participation) in order to be awarded a contract, even though the Bidder makes an adequate good faith efforts showing. This rule specifically prohibits UDOT from ignoring bona fide good faith efforts.
- IV. The following is a list of types of actions which UDOT should consider as part of the Bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.
  - A. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The Bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The Bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.

- B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
- C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- D. Negotiating in good faith with interested DBEs.
  - (1) It is the Bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.
  - (2) A Bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration.
    - (a) The fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable.
    - (b) No specific price differential has been established by 49 CFR 26. This approach allows flexibility.
    - (c) Along with the reasonableness of the cost necessarily comes the fact that prime Contractors are not expected to bear unreasonable costs.
    - (d) Any burden that a non-DBE subcontractor might face is also limited by the reasonableness of competing bids.
  - (3) The ability or desire of a prime Contractor to perform the work of a contract with its own organization does not relieve the Bidder of the responsibility to make good faith efforts. Prime Contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.
  - (4) The ability or desire of a prime Contractor to bundle the work of a subcontractor who wishes to perform all the work of the subcontract with its own organization does not relieve the Bidder of the responsibility to require a subcontractor to make good faith efforts. Subcontractors are not

required to accept higher quotes from lower tier DBEs if the price difference is excessive or unreasonable.

- E. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The Contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the Contractor's efforts to meet the project goal.
- F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- H. Effectively using the services of available minority/women community organizations; minority/women Contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

NOTE: The DBE 'Contact Log' in EBS, submitted as part of the Bid Proposal, can be used to document the following efforts:

IV. A.

IV. C.

IV. D. (1)

The 'Quote Comparison' in EBS, submitted as part of the Bid Proposal, can be used to document the following efforts:

IV.B.

IV. D. (3)

V. In determining whether a Bidder has made good faith efforts, the DEPARTMENT may take into account the performance of other Bidders in meeting the contract. For example, when the apparent successful Bidder fails to meet the contract goal, but others meet it, UDOT may reasonably raise the question of whether, with additional reasonable efforts, the apparent successful bidder could have met the goal. If the apparent successful Bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other Bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful Bidder having made good faith efforts.

Submit with the Bid Proposal documentary evidence to prove that good faith efforts were accomplished:

- 1. Submit copies of all solicitations: correspondence, faxes, advertisements, telephone logs with dates, times, names of persons contacted, nature of conversation, DBEs' responses, and etc.
- 2. If DBEs submitted quotes that were not used because the range of additional costs was determined to be excessive or unreasonable, submit the range that has been determined by the Bidder to be a reasonable range of additional costs and explain how that range was determined.
- 3. As a part of demonstrating a reasonable range of additional costs, submit copies of all subcontractor quotes, copies of spread sheet(s) which compare all DBE quotes with non-DBE quotes and which include bid item(s) quoted, work classifications, quantities, prices, and dollar amounts.
- 4. Submit a narrative of specific names and types of information, assistance, considerations given, and efforts to assist DBEs under Item IV, subparts C through F.

# DBE BID ASSURANCE COMPLETE ONLY PART A. OR PART B.

# PART A. RACE CONSCIOUS DBE PARTICIPATION SPECIFIC ASSIGNED CONTRACT DBE GOAL FOR BID EVALUATION PERCENT

If the DBE goal which is indicated in Section A,, CONTRACT GOAL, of APPENDIX A, BID CONDITIONS, DISADVANTAGED BUSINESS ENTERPRISE (DBE) is greater than 0.0 %, complete only Part A, and submit *DBE Commitment*, and if applicable, *Documentation of Good Faith Efforts*.

By signing the BID REPORT (either manually or electronically), it is understood that those individuals who sign as owners or authorized representatives of the Bidder, have read and are familiar with APPENDIX A, SPECIAL PROVISION, BID CONDITIONS, DISADVANTAGED BUSINESS ENTERPRISE and hereby certify that good faith efforts have been utilized to meet or exceed the goal of the DBE Program as established by the DBE Special Provision.

Indicat	re intended DBE commitment.
	We intend to meet or exceed the contract goals as per the DBE Commitment which is submitted with the Bid Proposal.
	RACE CONSCIOUS AND RACE NEUTRAL COMMITMENT PERCENT
	We fail to meet the advertised goal. This firm commits to DBE participation as per the DBE Commitment which is submitted with the EBS Bid Proposal and to continue Good Faith Efforts throughout the performance of the project. Documentation of Good Faith Efforts is submitted with the Bid Proposal, including:  1. DBE Contact Log Report

# PART B. RACE NEUTRAL DBE PARTICIPATION ASSIGNED CONTRACT DBE GOAL FOR BID EVALUATION\_\_\_\_\_

2. Quote Comparison Report

PERCENT

If the DBE goal, which is indicated in Section A., CONTRACT GOAL, of APPENDIX A, BID CONDITIONS, DISADVANTAGED BUSINESS ENTERPRISE (DBE) is **0.0%**, complete only Part B and submit *Race Neutral DBE Information*.

By signing the BID REPORT (either manually or electronically), it is understood that those individuals who sign as owners or authorized representatives of the Bidder, have read and are familiar with APPENDIX A, SPECIAL PROVISION, BID CONDITIONS, DISADVANTAGED BUSINESS ENTERPRISE and hereby certify that equal opportunity action has been utilized to allow DBEs to compete for and perform on subcontracts.

We do not intend to sublet a portion of the	e contract work.
 	ct work. Our firm has taken equal opportunity perform on subcontracts. Documentation of Bid Proposal, including:
1. RACE NEUTRAL DB	E COMMITMENT PERCENT
2. DBE Contact Log Repo	ort
3. Quote Comparison Rep	port

#### VIII. ATTENTION CONTRACTORS

# **E.E.O.** Affirmative Action Requirements on Federal and Federal-Aid Construction Contracts

### Changes in Hometown Plan and Special Bid Conditions

All imposed Plans and the Philadelphia Plan approvals have been rescinded.

The use of Special Bid Conditions will discontinue.

### New Requirements

Effective immediately all requests for bids/solicitations on all contracts and subcontracts of \$10,000 or more, will include the Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity, (Executive Order 11246), (Appendix A) and the Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246), (Appendix B). The provisions of FHPM 6-4-1-2 will continue to be used.

We recognize that there will be some duplicate material in the contracts as a result of incorporating the new OFCCP requirements. But we cannot discontinue use of Special Provision (Attachment 1 of FHPM 6-4-1-2) as it is regulatory material that requires an amendment by the Secretary of Transportation and publishing in the Federal Register. We have been informed by our Washington Office that FHPM 6-4-1-2 will be amended to eliminate any duplication in the contract provisions.

Appendix A, Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity, must include the goals for minority and female participation in each craft on all contracts and subcontracts.

As indicated in the final rulemaking published in the October 3, 1980, Federal Register by the Office of Federal Contract Compliance Programs, standards and goals for minority utilization, throughout the country, have now been implemented. Goals for minority representation in each trade are shown in Attachment A for the Contractor's use and guidance. (As previously indicated, the goals for female utilization will apply to all contracts and subcontracts irrespective of their geographical location.)

Paragraph 3, of Appendix A points out that the Contractor will provide written notification to OFCCP of award of any subcontract in excess of \$10,000. The Contractors must be advised that their notification will continue, as our regular reporting procedures, by making such notification to the Utah Department of Transportation that will then report it to the FHWA, that will then report to OFCCP.

#### APPENDIX A

# Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246).

- 1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
- 2. The goals and timetables minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables	Goals for m participation	2	Goals for female participation	
in	each trade	trade		
April 1, 1980 until	March 31, 1981	6.9%		
October 3, 1980	<u>0%_</u>			

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or Federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. See Attachment A. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federal involved construction.

The Contractor's compliance with the Executive Order and the regulations is 41 CFR part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and their efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of their projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the Contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3.	The Contractor shall provide written notification to the Director of the Office of Federal
	Contract Compliance Programs within 10 working days of award of any construction
	subcontract in excess of \$10,000 at any tier for construction work under the contract
	resulting from this solicitation. The notification shall list the name, address and telephone
	number of the subcontractor; employer identification number of the subcontractor;
	estimated dollar amount of the subcontract; estimated starting and completion dates of the
	subcontract; and the geographical area in which the subcontract is to be performed.

4.	As used in this Notice, and in the	contract resulting	from this solic	citation, the "cove	rec
	area" is, State of Utah, County of	Davis	ě		

#### APPENDIX B

# Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246)

- 1. As used in these specifications:
  - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted:
  - b. "Director" means Director, Office of Federal Contract Compliance Programs, United State Department of Labor, or any person to whom the Director delegates authority;
  - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
  - d. "Minority" includes:
    - (i) Black (all persons having origins in any of the black African racial groups not of Hispanic origin);
    - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
    - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
    - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
- 2. Whenever the Contractor, or any at any tier, subcontracts a portion of the work involving any construction trade, they shall physically include in each subcontract in excess of \$10,000 the provision of these specifications and the Notice that contains the applicable goals for minority and female participation and that is set forth in the solicitations from which this contract resulted.
- 3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, their affirmative action obligations on all work in the plan area (including goals and timetables) shall be in accordance with that Plan for those trades that have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor participating in an approved Plan is individually required to comply with its obligations under the E.E.O. clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's failure to take good faith efforts to achieve the Plan goals and timetables.

- 4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonable be able to achieve in each construction trade in which they have employees in the covered area. Covered Construction Contractors performing construction work in geographical areas where they do not have a federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the federal register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting their goals in each craft during the period specified.
- 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
- 6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities, Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
- 7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon their effort to achieve maximum results from their actions, The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
  - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work, The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
  - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or their union have employment opportunities available, and maintain a record of the organization's responses.

- c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have take.
- d. Provide immediate written notification to the Director when the union with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area that expressly includes minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
- f. Disseminate the Contractor's E.E.O. policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting their E.E.O. obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc. by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company E.E.O. policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's E.E.O. policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's E.E.O. policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of

applications for apprenticeship or other training by ANY recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc. such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the E.E.O. policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction Contractors and suppliers, including circulation of solicitations to minority and female Contractor associations and other business associations.
- p. Conduct a review, at least annually of all supervisors' adherence to and performance under the Contractor's E.E.O. policies and affirmative action obligation.
- 8. Contractors are encouraged to participate in voluntary associations that assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a Contractor association, joint Contractor-union, Contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group, has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goal and timetables, and can provide access to documentation that demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

- 9. A single goal for minorities and a separate single goal for women has been established, The Contractor, however is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority, Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved their goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
- 10. The Contractor shall not use the goals and timetables or affirmative actions standards to discriminate against any person because of race, color, religion, sex, or national origin.
- 11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
- 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
- 13. The Contractor in fulfilling their obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from their efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
- 14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company E.E.O. policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer,) dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed, Records shall be maintained in an easily understandable and retrievable form, however, to the degree that existing records satisfy this requirement, Contractors shall not be required to maintain separate records.
- 15. Nothing herein provided shall be construed as a limitation upon the application of other laws that establish different standards of compliance or upon application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

# GOALS FOR MINORITY PARTICIPATION FOR EACH TRADE

<b>County</b>	<b>Percentage</b>
Beaver	12.6
Box Elder	5.1
Cache	5.1
Carbon	5.1
Daggett	5.1
Davis	6.0
Duchesne	5.1
Emery	5.1
Garfield	12.6
Grand	10.2
Iron	12.6
Juab	5.1
Kane	12.6
Millard	5.1
Morgan	5.1
Piute	5.1
Rich	5.1
Salt Lake	6.0
San Juan	10.2
Sanpete	5.1
Sevier	5.1
Summit	5.1
Tooele	6.0
Uintah	5.1
Utah	2.4
Wasatch	5.1
Washington	12.6
Wayne	
Weber	

## IX. Specific Equal Employment Opportunity Responsibilities

#### 1. General

- a. Equal employment opportunity requirements not to discriminate and to take affirmative action to assure equal employment opportunity as required by Executive Order 11246 and Executive Order 11375 are set forth in Required Contract Provisions (Form PR-1273 or 1316, as appropriate) and these Special Provisions that are imposed pursuant to Section 140 of Title 23, U.S.C. as established by Section 22 of the Federal Highway Act of 1968. The requirements set forth in these Special provisions shall constitute the specific affirmative action requirements for project activities under this contract and supplement the equal employment opportunity requirements set forth in the Required Contract Provisions.
- b. Contractors will work with the State highway agencies and the Federal Government in carrying out equal employment opportunity obligations and in their review of contractor activities under the contract.
- c. Contractors and all their Subcontractors holding subcontracts not including material suppliers, of \$10,000 or more, will comply with the following minimum specific requirement activities of equal employment opportunity: (The equal employment opportunity requirements of Executive Order 11246, as set forth in Volume 6, Chapter 4, Section 1, Subsection 1 of the Federal-Aid Highway program Manual, are applicable to material suppliers as well as Contractors and Subcontractors.) The Contractor will include these requirements in every subcontract of \$10,000 or more with such modification of language as is necessary to make them binding on the Subcontractor.

### 2. Equal Employment Opportunity Policy

Contractors will accept as operating policy the following statement that is designed to further the provision of equal employment opportunity to all persons without regard to their race, color, religion, sex, or national origin, and to promote the full realization of equal employment opportunity through a positive continuing program:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, or national origin. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, apprenticeship, and/or on-the-job training."

# 3. Equal Employment Opportunity Officer

Contractors will designate and make known to the State highway agency contracting officers an equal employment opportunity officer (hereinafter referred to as the E.E.O. Officer) who will have the responsibility for and must be capable of effectively administering and promoting an active Contractor program of equal employment opportunity and who must be assigned adequate authority and responsibility to do so.

# 4. Dissemination of Policy

- a. All members of the Contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the Contractor's equal employment opportunity policy and contractual responsibilities to provide equal employment opportunity in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
  - (1) Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the Contractor's equal employment opportunity policy and its implementation will be reviewed and explained. The meetings will be conducted by the E.E.O. Officer or other knowledgeable company official.
  - (2) All new supervisory or personnel office employees will be given a thorough indoctrination by the E.E.O. Officer or other knowledgeable company official covering all major aspects of the Contractor's equal employment opportunity obligations within thirty days following their reporting for duty with the Contractor.
  - (3) All personnel who are engaged in direct recruitment for the project will be instructed by the E.E.O. Officer or appropriate company official in the Contractor's procedures for locating and hiring minority group employees.
- b. In order to make the Contractor's equal employment opportunity policy known to all employees, prospective employees, and potential sources of employees, i.e., schools, employment agencies, labor unions (where appropriate), college placement officers, etc., the Contractor will take the following actions:
  - (1) Notices and posters setting forth the Contractor's equal employment opportunity policy will be placed in areas readily accessible to employees, applicants for employment, and potential employees.

(2) The Contractor's equal employment opportunity policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

#### 5. Recruitment

- a. When advertising for employees, the Contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be published in newspapers or other publications having a large circulation among minority groups in the area from which the project work force would normally be derived.
- b. The Contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants, including, but not limited to, State employment agencies, schools, colleges, and minority group organizations. To meet this requirement, the Contractor will, through his E.E.O. Officer, identify sources of potential minority group employees, and establish with such identified sources of procedures whereby minority group applicants may be referred to the Contractor for employment consideration.

In the event the Contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, they are expected to observe the provisions of that agreement to the extent that the system permits the Contractor's compliance with equal employment opportunity contract provisions, (The U.S. Department of Labor has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the Contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. Contractors will encourage their present employees to refer minority group applicants for employment by posting appropriate notices or bulletins in areas accessible to all such employees. In addition, information and procedures with regard to referring minority group applicants will be discussed with employees.

#### 6. Personnel Actions

Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, or national origin, The following procedures shall be followed:

a. Contractors will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

- b. Contractors will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. Contractors will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the Contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. Contractors will promptly investigate all complaints of alleged discrimination made to them in connection with their obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the Contractor will inform every complainant of all avenues of appeal.

### 7. Training and Promotion

- a. Contractors will assist in locating, qualifying, and increasing the skill of minority group and women employees, and applicants for employment.
- b. Consistent with the Contractor's work force requirements and as permissible under Federal and State regulations, the Contractor shall make full use of training programs i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event the training Special provision is provided under this contract, this subparagraph will be superseded as indicated in Attachment 2.
- c. Contractors will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. Contractors will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

#### 8. Unions

If Contractors rely in whole or in part upon unions as a source of employees, Contractors will use their best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by Contractors either directly or through a Contractor's association acting as agent will include the procedures set forth below:

- a. Contractors will use their best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
- b. Contractors will use their best efforts to incorporate an equal employment opportunity clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, or national origin.
- c. Contractors are to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the Contractor, the Contractor shall so certify to the State Highway Department and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the Contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the Contractor will through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, or national origin, making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The U.S. Department of Labor has held that it shall be no excuse that the union with which the Contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the Contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such Contractor shall immediately notify the State highway agency.

# 9. Subcontracting

- a. Contractors will use their best efforts to solicit bids from and to utilize minority group Subcontractors or Subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of minority-owned construction firms from State highway agency personnel.
- b. Contractors will use their best efforts to ensure Subcontractor compliance with their equal employment opportunity obligations.

### 10. Records and Reports

- a. Contractors will keep such records as are necessary to determine compliance with the Contractor's equal employment opportunity obligations. The records kept by the Contractor will be designed to indicate:
  - (1) the number of minority and non-minority group members and women employed in each work classification on the project,
  - (2) the progress and efforts being made in cooperation with unions to increase employment opportunities for minority and women (applicable only to Contractors who rely in whole or in part on unions as a source of their work force),
  - (3) the progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees, and
  - (4) the progress and efforts being made in securing the services of minority group Subcontractors or Subcontractors with meaningful minority and female representation among their employees.
- b. All such records must be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the State highway agency and the Federal Highway Administration.
- c. Contractors will submit to the State highway agency a monthly E.E.O. report for each month for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form PR-1391. Each covered Subcontractor will submit the reports for the life of the Subcontractor's agreement and indicate last month of work. When no work is performed during a month indicate this on the report as NO WORK.

## **Training Special Provisions**

This Training Special Provisions supersedes subparagraph 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," (Attachment 1), and is in implementation of 23 U.S.C.C.140(a).

As part of the Contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide on-the-job training aimed at developing full journeymen in the type of trade or job classification involved.

The number of trainees to be trained under the special provision will be \_\_\_\_\_ (amount to be filled in by the State Highway Department).

In the event that a Contractor subcontracts a portion of the contract work, they shall determine how many, if any, of the trainees are to be trained by the Subcontractor, provided, however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision, The Contractor shall also ensure that this training special provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the State highway agency for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that they have taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journeyman status or in which they have been employed as a journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the State highway agency and the Federal Highway Administration. The State highway agency and the Federal Highway Administration shall approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the division office. Some off-site training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the engineer, reimbursement will be made for training persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources provided such other source does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for off-site training indicated above may only be made to the Contractor where they do one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee, or pays the trainee's wages during the off-site training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirements of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program. It is not required that all trainees be on board for the entire length of the contract. Contractors will have fulfilled their responsibilities under this Training Special Provision if they have provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

Contractors shall furnish the trainee a copy of the program the Contractor will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed.

The Contractor will provide for the maintenance of records and furnish periodic reports documenting their performance under this Training Special Provision.

#### X. REQUIRED CONTRACT PROVISIONS

#### FEDERAL-AID CONSTRUCTION CONTRACTS

Page	
I.	General
II.	Nondiscrimination
III.	Nonsegregated Facilities
IV.	Payment of Predetermined Minimum Wage
V.	Statements and Payrolls
VI.	Record of Materials, Supplies, and Labor
VII.	Subletting or Assigning the Contract
VIII	Safety: Accident Prevention

IX. False Statements Concerning Highway Projects
 X. Implementation of Clean Air Act and Federal
 Water Pollytion Control Act

Water Pollution Control Act

XI. Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion

XII. Certification Regarding Use of Contract Funds for

Lobbying

#### ATTACHMENTS

A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

#### I. GENERAL

- 1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
- 2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.
- 3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.
- 4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2; Section IV, paragraphs 1, 2, 3, 4, and 7; Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

- 6. **Selection of Labor:** During the performance of this contract, the contractor shall not:
- a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
- b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

#### II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- 1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
- a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.
- b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."

- 2. **EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.
- 3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and

will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- 4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended)
- c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.
- 5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

#### 6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision
- d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:
- a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
- b The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

## Federal-Blue Book

- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information
- d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.
- 8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.
- a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.
- b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.
- c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.
- 9. **Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.
- a. The records kept by the contractor shall document the following:
- (1) The number of minority and non-minority group members and women employed in each work classification on the project;
- (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;
- (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
- (4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

#### III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.
- b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).
- c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

#### IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

#### 1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL

poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

- b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.
- c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

#### 2. Classification:

- a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.
- b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:
- (1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;
- (2) the additional classification is utilized in the area by the construction industry;
- (3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
- (4) with respect to helpers, when such a classification prevails in the area in which the work is performed.
- c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the

contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

### 3. Payment of Fringe Benefits:

- a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.
- b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

# $4.\;\;$ Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

## a. Apprentices:

- (1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.
- (2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level

## Federal-Blue Book

hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

- (3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.
- (4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

#### b. Trainees:

- (1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.
- (2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.
- (3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.
- (4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

### c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

#### 5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

## 6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

## 7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

#### 8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

# 9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

#### V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

#### 1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

#### 2. Payrolls and Payroll Records:

- a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.
- b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked: deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.
- c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this

- Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.
- d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;
- (2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;
- (3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.
- e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.
- f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.
- g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

## VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

- 1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:
- a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

- b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.
- c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.
- 2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

#### VII. SUBLETTING OR ASSIGNING THE CONTRACT

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).
- a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

## VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment

and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

# IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

## NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented; Shall be fined not more that \$10,000 or imprisoned not more than 5 years or both."

# X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
- 2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
- 3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.
- 4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

# XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

# $1. \ \ \, \textbf{Instructions} \ \ \, \textbf{for} \ \ \, \textbf{Certification} \ \ \, \textbf{-} \ \, \textbf{Primary} \ \ \, \textbf{Covered}$ Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant

knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

- d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

\*\*\*\*

# Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

## Federal-Blue Book

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and
- d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- 2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* \*

# 2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

# Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

# XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

## Federal-Blue Book

- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or
- entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XI. Wage Rates Applicable

# GENERAL DECISION UT020023 01/17/03 UT23

# **General Decision Number UT020023**

Superseded General Decision No. UT010023

State: Utah

Construction Type:

# **HIGHWAY**

County(ies):

# DAVIS WEBER

# HIGHWAY CONSTRUCTION PROJECTS

<b>Modification Number</b> Publication 1	Date
0 03/01/2002	
1 05/17/2002	
2 12/27/2002	
3 01/17/2003	

# ELEC0354C 06/01/2001

	Rates	Fringes
ELECTRICIANS	23.43	6.32+4.2%
* ENGI0003Y 07/01/2000  POWER EQUIPMENT OPERATORS:	Rates	Fringes
Blade smooth/finish	20.92	9.73
Tractor, small rubber tire with attachments	18.92	9.73
IRON0027E 07/01/2002	Rates	Fringes
IRONWORKERS, Reinforcing	20.76	8.62

# SUUT3005A 03/25/1992

50015003A 05/25/1772	Rates	Fringes
CARPENTERS	16.13	2.80
CEMENT MASONS	14.40	2.41
FLAGGERS	6.59	1.75
IRONWORKERS:		
Ornamental & Structural	16.65	3.65
LABORERS:		
General Laborer, Asphalt Raker, Landscape Laborer	10.04	2.53
Concrete Laborer (Compaction, Underground Fine Grading, Operation of Shute or Bucket)	10.04	2.53
Grade Laborer (Uses hand held level to check grade, inserts grade stakes in concrete)	10.04	2.53
Pipelayer (Smooths sides and bottom of trenches, does rigging of pipe, assembles and installs concrete and tile pipe)	11.03	3.54
Laborer, Power Tools (Cutting Torch, Operators of Gasoline, Electric or Pneumatic Tools, e.g. compressor, compactor, jackhammer, vibrator, concrete saw, chain saw, and concrete cutting torch)	12.65	2.79
Fence Erection Laborer (clearing of right of way, unloading of materials by hand, digging of post holes & pouring of concrete in connection therewithin)	10.04	2.53
PAINTERS, SPRAY	14.05	1.62

# POWER EQUIPMENT OPERATORS:

A 1 1/E' : 1: M 1:	1 4 1 4	<i>7.</i> (0)
Asphalt Finishing Machine	14.14	5.69
Asphalt Plant Operator	18.05	7.23
Backhoe, Tire & Track, under 5 cu. yds.	13.44	4.57
Backhoe, Tire & Track, over 5 cu. yds.	14.05	7.23
Blade, Rough	11.60	2.22
Bulldozer, All Sizes	18.05	7.08
Chip Spreader	16.29	7.08
Laydown Machine, Asphalt/Concrete	12.53	2.22
Loader, All Sizes	18.05	5.09
Paver, Asphalt	12.53	2.22
Roller, Asphalt	12.80	4.12
Roller, Grade/Compaction	11.01	3.31
Screedman	10.95	3.09
TRUCK DRIVERS:		
Dump Trucks - Water Level Capacity (Bottom, End and Side), Including Dumpster Truck, Turnawagons, Turnarockers and Dumpcrete):		
Less than 8 cu. yds.	10.50	
8 cu. yds. and less than 14 cu. yds.	9.80	2.22
14 cu. yds. and less than 35 cu. yds.	16.14	4.87
Water, Fuel and Oil Trucks:		
Up to 2500 gallons	9.95	2.22
2500 gallons to less than 4000 gallons	11.67	3.31

Oil Spreader Operator where Boot Man is not required	9.25	
Transport Truck	10.90	1.42
* TEAM0222D 07/01/2000	Rates	Fringes
TRANSIT MIX TRUCKS:		
0 cu. yds. to 8 cu. yds.	16.615	8.69

8 1/4 cu. yds. to 14 cu. yds. 16.715

**WELDERS** - Receive rate prescribed for craft performing operation to which welding is incidental.

\_\_\_\_\_

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

8.69

\_\_\_\_\_

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

## WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U. S. Department of Labor 200 Constitution Avenue, N. W. Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N. W. Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U. S. Department of Labor 200 Constitution Avenue, N. W. Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

# XII. Bidding Schedule

# Utah Department of Transportation Bidder's Schedule

Bid Opening Date: 4/29/2003Region: REGION 1Project Number: STP-0126(6)6County DAVIS

Project Name: SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

Description: SAFETY/TRAFFIC OPERATIONS

Funding FEDERAL

# Item Description Quantity Unit

10 - 1	ROADWAY			
1	012850010	Mobilization	1	lump sum
2	013150010	Public Information Services	1	lump sum
3	015540005	Traffic Control	1	lump sum
1	01557000*	Maintenance of Traffic (MOT)		
5	015720010	Dust Control and Watering	15000	gallon
5 6	01721001P	Survey		_
7	01892000*	Reconstruct Irrigation Diversion Box	1	each
3	01892002*	Reconstruct Cleanout Box	3	each
9	01892002*	Reconstruct Valve Box	11	each
10	01892004	Reconstruct Manhole	10	
11	01892005*	Reconstruct Monument Box	10	each
12	020560020	Granular Borrow	375	
13	0208300020	Relocate Fire Hydrant	1	each
14	02221000*	Remove Light Pole	1	each
15	02221000	Remove and Salvage Monument	1	
		Remove Bus Bench		each
16	02221002*		3	each
17	02221003*	Remove Utility Box Remove Catch Basin	1	each
18	022210030	Remove Catch Basin Remove Pipe Culvert	3	each
9	022210095	·		foot
20	02222000P	Remove Concrete Sidewalk		square yard
21	02222001P	Remove Concrete Driveway		square yard
22	02222002P	Remove Concrete Curb and Gutter	1000	
23	022220040	Remove Asphalt Pavement		square yard
24	02316002*	Roadway Excavation (Plan Quantity)		cubic yard
25	02319000*	Potholing for Utilities		each
26	02610041*	12 inch Reinforced Concrete Pipe Culvert, Class B		foot
27	026350030	Manhole Frame and Solid Cover, Std Dwg GF 2	1	each
28	026350040	Rectangular Grate And Frame (Bicycle Safe Grating) Std Dwg GF 3	4	each
29	027050010	Asphalt Pavement Sawing		inch-foot
30	027210070	Untreated Base Course 3/4 inch or 1 inch Max	400	ton
31	027410010	HMA Mix - 1/2 inch	1040	ton
32	027480050	Emulsified Asphalt SS-1H	6	ton
33	02765002*	Pavement Message Paint	68	each
34	02765003*	Remove Pavement Markings		foot
35	02765005*	Pavement Marking Paint	13	gallon
36	02771000*	Concrete Waterway	247	square foot
37	027710025	Concrete Curb and Gutter Type B1	912	foot
88	027710045	Concrete Driveway Flared, 7 inch Thick	435	square foot
39	027710050	Concrete Driveway Open, 6 inch Thick	1315	square foot
10	027710055	Concrete Driveway Open, 7 inch Thick	2870	square foot
11	02771008*	Pedestrian Access Ramp Type E	1002	square foot
12	02772000*	Pothole Patching	3600	square foot
13	02776000*	Textured Concrete Flatwork 4 inch thick	860	square foot
14	027760010	Concrete Sidewalk	3385	square foot

<sup>\*</sup>Note: Item numbers ending with "\*" or "P" identify a change to the Standard Specification, Supplemental Specifications or Measurement and payment. Read all related documents carefully.

Page 1 of 2 4/1/2003 11:14:28

# Utah Department of Transportation Bidder's Schedule

Bid Opening Date: 4/29/2003Region: REGION 1Project Number: STP-0126(6)6County DAVIS

Project Name: SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

Description: SAFETY/TRAFFIC OPERATIONS

Funding FEDERAL

#	Item	Description	Quantity	Unit
10 - F	ROADWAY			
<del>1</del> 5	02788000*	Micro-Surfacing	66000	square foot
16	028910010	Relocation of Sign	3	each
17	029120010	Contractor Furnished Topsoil	125	square yard
-8	02922006*	Turf Sod	860	square foot
19	02961001*	Rotomilling	6700	square yard
50	03310000*	Construct Catch Basin	4	each
51	03310001*	5 ft Concrete Manhole	1	each
:0 - S	STRUCTURES			
52	02225001*	Asphalt Surfacing Removal (Structures)	450	square yard
3	03392001*	Penetrating Concrete Sealer	2850	foot
4	03924001*	Structural Concrete Repair (Repair Bent)	3	each
5	03924002*	Structural Concrete Repair (Beam End Repair)	12	each
6	03924003*	Structural Concrete Repair (Fence Posts Concrete)	10	each
7	03924004*	Structural Concrete Repair (Under Side Deck Overhang)	1	each
8	03924005*	Structural Concrete Repair (Collision Repair)	1	each
9	03925000*	Polymer Overlay	44200	square foot
0	03934001*	Pothole Patching	7000	square foot
31	05831001*	Expansion Joint Modification (Sidewalk)	16	foot
32	05831002*	Expansion Joint Modification (Bridge Deck)	90	foot
3	05831003*	Expansion Joint Modification (Strip Seal Gland Replacement)	90	foot
64	07925000*	Hot Poured Joint Seal	60	foot
IO - S	BIGNING			
65	028910190	Sign Type P-2, 12 inch X 18 inch	3	each
50 - S	SIGNALS			
66	02892000*	Remove and Salvage Existing Equipment	1	lump sum
7	02892001*	Traffic Signal System Clearfield - 300 N. & Main Street	1	lump sum
8	028920020	Installation of State Furnished Material	1	lump sum
9	028920025	Installation of State Furnished Mast Arm Mounted Sign	4	each
0	135540010	Polymer Concrete Junction Box	11	each

Page 2 of 2 4/1/2003 11:14:28

<sup>\*</sup>Note: Item numbers ending with "\*" or "P" identify a change to the Standard Specification, Supplemental Specifications or Measurement and payment. Read all related documents carefully.

# XIII. Measurement and Payment

# MEASUREMENT AND PAYMENT

The Department will measure and pay for each bid item as detailed in this section. Payment is contingent upon acceptance by the Department.

Items are listed by Specification and in tables as follows:

Item #	Bid item number	Bid Item Name	Unit of measurement and payment
Additional information goes here.			

1	012850010	Mobilization	Lump sum
	Payment	Amount Paid	When Paid
	First	The lesser of 25% of mobilization or 2.5% of contract	With first estimate
	Second	The lesser of 25% of mobilization or 2.5% of contract	With estimate following completion of 5% of contract
	Third	The lesser of 25% of mobilization or 2.5% of contract	With estimate following completion of 10% of contract
	Fourth	The lesser of 25% of mobilization or 2.5% of contract	With estimate following completion of 20% of contract
	Final	Amount bid in excess of 10% of contract price.	Upon substantial completion

2	0	013150010	Public Information	on Services		Lump Sum
A.	A. Includes compensation for:					
	1.	All fliers, publicomplete the ite	*	telephone lines, a	nd all other labor and materials required	to
	2.		aterials, installation,	maintenance, and	removal of the	public
		information ser	C			
В.	The I	Engineer will mon	itor the PIM and all	public information	services.	
	1.	When the Cont	ractor provides accep	ptable public infor	mation services in accordance with these	<b>)</b>
	specifications, partial payments for the pay item "Public Information Services" will be made as the work progresses.				as the	
	<ol> <li>Failure to provide acceptable public information services will result in withholding of payment for this item.</li> </ol>			t for this		
	3.	Partial paymen	ts made as follows:			
		% of Original	<b>Contract Earned</b>	% of amount bi	d item	
			5	25		
			10	40	less all previous payments	
			25	50	less all previous payments	
			75	75	less all previous payments	

C. The term "original Contract amount" as used above means the amount bid for the construction items on this Contract, not including the amounts bid for Public Information Services and Mobilization.

100

3	015540005	Traffic Control	Lump Sum
Partial Payment: Based on the percentage of the project completed, excluding the cost of the traffic control.			

100

less all previous payments

4	01557000*	Maintenance of Traffic (MOT)	Lump Sum
A.	Includes 3 V.M.S.		
B.	Includes Static Signs pe	r Sheet DT-1.	

5	015720010	Dust Control and Watering	Gallon	
---	-----------	---------------------------	--------	--

l previous payments
l previous payments
l previous payments
l

7	01892000*	Reconstruct Irrigation Diversion Box	Each
In place			
8	01892002*	Reconstruct Cleanout Box	Each
In place			
9	01892004*	Reconstruct Valve Box	Each
In place			
10	01892005*	Reconstruct Manhole	Each
In place			
11	01892006*	Reconstruct Monument Box	Each
In place			
12	020560020	Granular Borrow	Ton
Refer to Section 01280 "Measurement."			
13	02083000*	Relocate Fire Hydrant	Each
14	02221000*	Remove Light Pole	Each
Remove	d		
15	02221001*	Remove and Salvage Monument	Each
Remove	d and delivered to	UDOT.	
16	02221002*	Remove Bus Bench	Each
Remove	d		

17	02221003*	Remove Utility Box	Each
Remove	ed		

18	022210030	Remove Catch Basin	Each
Remove	ed		

19	022210095	Remove Pipe Culvert	Feet	
----	-----------	---------------------	------	--

20	02222000P	Remove Concrete Sidewalk	Square yard
A.	Area of steps will be l	pased on the area of the horizontal projection.	
В.	Department will not p	pay separately for concrete sawing.	

21	02222001P	Remove Concrete Driveway	Square yard
Departi	nent will not pay s	eparately for concrete sawing.	

22	02222002P	Remove Concrete Curb and Gutter	Feet
Departi	nent will not pay s	eparately for concrete sawing.	

	23	022220040	Remove Asphalt Pavement	Square vard
ı	23	022220040	Kemove Aspirant I avenient	Square yaru

Regardless of the depth or number of courses encountered.

- A. Do not measure discontinued roads within the limits of the new roadbed or roads that are disturbed in performing other items of work.
- B. Department will pay for material placed to cover pavements or fill depressions under "Roadway Excavation," or "Borrow."
- C. Department will pay for concrete curb and concrete curb and gutter integral to the concrete pavement to be removed under "Remove Concrete Pavement."

24	02316002*	Roadway Excavation (Plan Quantity)	Cubic yard
24	02310002	Roadway Excavation (Tian Quantity)	Cubic yaru

- A. Plan quantity, in final position, computed by the method of average end areas.
- B. Department authorizes cross sections or modifications including excavation below subgrade, unstable slopes, unpreventable slides and terracing.
- C. Department will not measure or pay for excavation in excess of that authorized.
- D. The Department pays for re-handing or additional haul when it is directed in writing as "Extra Work."

25 02319000* Potholing for Utilities Each
---

26	02610041*	12 inch Reinforced Concrete Pipe Culvert, Class B	Feet			
Measure	Measured parallel to the center line from barrel end to barrel end, in place.					

27 026350030		Manhole Frame and Solid Cover, Std Dwg GF 2	Each
In place			

28	026350040	Rectangular Grate and Frame, (Bicycle Safe Grating), Std Dwg GF 3	Each
In place			

29	027050010	Asphalt Pavement Sawing	Inch-feet
----	-----------	-------------------------	-----------

Measurement: Average depth in inches times length in feet.

Payment: When no depth is shown, payment will be based on a depth of 6 inches. If the average depth exceeds the plan depth by 2 inches or more, the unit price will increase by 20 percent.

30 027210070 Untreated Base Course 3/4 inch or 1 inch Max		Untreated Base Course 3/4 inch or 1 inch Max	Ton
In place			

31 027410010 HMA Mix - 1/2 inch Ton
-------------------------------------

- A. Includes aggregates, asphalt binder, hydrated lime, other additives, etc.
- B. The Department will not pay separately for asphalt binder, hydrated lime, additives, etc.

32   027480050   Emulsified Asphalt SS-1H   Ton
---

Payment will be based on Vendor's invoice with certified weight-Emulsified Asphalt SS-1H diluted 1 to 1. No payment will be made for additional dilution.

33 02765002\* Pavement Message Paint Each

## In place, measurement - Painted Pavement Messages:

- A. Letter = one message.
- B. Arrow = one message.
- C. Multi-headed arrow = one message per arrow.
- D. School crossbars = one message per 24 inch x 10 ft bar.
- E. Crosswalk = two message per lane and two messages per shoulder.
- F. Stop Bar = one message per lane and one message per shoulder.
- G. Railroad crossing markings = seven messages per lane.
  - 1. 'R' = one message each (two required).
  - 2. 'X' = two messages.
  - 3. Transverse Bar = one message each (two required).
  - 4. Stop Bar = one message.

## Payment:

- A. The Department will not pay for removal of unauthorized, smeared, or damaged markings.
- B. Price reduction for paint application rate:

RatePay FactorAt the specified rate1.01-10 percent below the specified rate0.7511-15 percent below the specified rate0.50More than 15 percent below the specified rateMay be accepted at 0.40 percent or required to be repainted.

34 02765003* Remove Pavement Markings Feet					
	ement for removing per foot each line re	pavement markings:			

## In place, Payment:

- A. The Department will not pay for removal of unauthorized, smeared, or damaged markings.
- B. Price reduction for paint application rate:

Rate	Pay Factor
At the specified rate	1.0
1-10 percent below the specified rate	0.75
11-15 percent below the specified rate	0.50
More than 15 percent below the specified rate	May be accepted at 0.40 percent or
	required to be repainted.

36	0	2771000*	Concrete Water	way	Square feet		
In p	lace.						
Pric	e Adjı	istments for Str	ength				
A.	Whe	n concrete is be	low specified strer	gth:			
	1.	1. Department may accept item at a reduced price					
	2.	The pay facto	or will be applied t	o the portion of the item which is r	epresented by the strength tests		
		that fall belov	w specified strengt	h.			
	3.	Department v	will calculate the p	ay factor as follows:			
		Psi below spe	cified strength:	Pay Factor:			
		1 - 100	0.98				
		101 - 200	0.94				
		201 - 300	0.88				

0.50 or Engineer may reject

301 - 400

More than 400

0.80

37		027710025	Concrete Curb a	and Gutter Type B1	Feet			
Mea	Measured along the roadway face. Include excavation if Roadway Excavation is not a bid item.							
Pric	e Adj	justments for Str	ength					
A.	Whe	en concrete is belov	w specified strength	n:				
	Department may accept item at a reduced price							
	2.	The pay factor	The pay factor will be applied to the portion of the item which is represented by the strength tests					
		that fall below	that fall below specified strength.					
	3.	Department wi	Department will calculate the pay factor as follows:					
		Psi below specified strength: Pay Factor:						
		1 - 100	0.98					
		101 - 200	0.94					
		201 - 300	0.88					
		301 - 400	0.80					
	More than 400 0.50 or Engineer may reject							

38	02	27710045	Concrete Drivew	ay Flared, 7 inch Thick	Square Feet	
In pla	In place, include Radius and Flares.					
Price	Price Adjustments for Strength					
A.	When	concrete is below	w specified strength:			
	1.	Department ma	ay accept item at a re	educed price		
	2.	The pay factor	will be applied to the	ne portion of the item which is represented by the strength t	ests	
		that fall below	specified strength.			
	3.	Department wi	ll calculate the pay	factor as follows:		
		Psi below speci	ified strength:	Pay Factor:		
		1 - 100	0.98			
		101 - 200	0.94			
		201 - 300	0.88			
		301 - 400	0.80			
		More than 400		0.50 or Engineer may reject		

39	•	027710050	Concrete Drivew	vay Open, 6 inch Thick	Square Feet	
In p	n place, include Radius and Flares.					
Pric	e Adj	ustments for Stre	ength			
A.	Whe	n concrete is below	w specified strength	:		
	1.	Department ma	ny accept item at a r	reduced price		
	2.	The pay factor	ay factor will be applied to the portion of the item which is represented by the strength tests			
		that fall below	ow specified strength.			
	3.	Department wi	ll calculate the pay	factor as follows:		
		Psi below speci	ified strength:	Pay Factor:		
		1 - 100	0.98			
		101 - 200	0.94			
		201 - 300	0.88			
		301 - 400	0.80			
		More than 400		0.50 or Engineer may reject		

40		027710055	Concrete Drivew	yay Open, 7 inch Thick	Square Feet	
In pl	In place, include Radius and Flares.					
Pric	Price Adjustments for Strength					
A.	A. When concrete is below specified strength:					
	1.	Department ma	ay accept item at a r	educed price		
	2. The pay factor will be applied to the portion of the item which is represented by the strength tests				ests	
		that fall below	specified strength.			
	3.	Department wi	ll calculate the pay	factor as follows:		
		Psi below speci	ified strength:	Pay Factor:		
		1 - 100	0.98			
		101 - 200	0.94			
		201 - 300	0.88			
		301 - 400	0.80			
		More than 400		0.50 or Engineer may reject		

41		02771008*	Pedestrian Access	s Ramp Type E	Square Feet	
In pl	In place					
Pric	e Ad	justments for Str	ength			
A.	Wh	en concrete is belov	w specified strength:			
	1.	Department ma	ay accept item at a re	educed price		
	2.	The pay factor	will be applied to th	ne portion of the item which is represented by the strength t	ests	
		that fall below	specified strength.			
	3.	Department wi	ll calculate the pay f	factor as follows:		
		Psi below spec	cified strength:	Pay Factor:		
		1 - 100	0.98			
		101 - 200	0.94			
		201 - 300	0.88			
		301 - 400	0.80			
		More than 400		0.50 or Engineer may reject		

42	02772000*	Pothole Patching	Square feet
A.	By the square foot in p	place.	
B.	There is no guarantee	of quantity for this item.	

Includes Excavation, Sawcutting, Compaction, UTBC, Tack Coat and HMA.

43	(	02776000*	<b>Textured Concre</b>	ete Flatwork 4 inch thick	Square feet		
In pl	In place						
Pric	e Adj	ustments for Str	ength				
A.	Whe	n concrete is below	w specified strength	:			
	1.	Department ma	ay accept item at a r	educed price			
	2.	The pay factor will be applied to the portion of the item which is represented by the strength tests					
		that fall below	specified strength.				
	3.	Department wi	ll calculate the pay	factor as follows:			
		Psi below spec	cified strength:	Pay Factor:			
		1 - 100	0.98				
		101 - 200	0.94				
		201 - 300	0.88				
		301 - 400	0.80				
		More than 400		0.50 or Engineer may reject			

44	027760010	Concrete Sidewalk	Square feet
----	-----------	-------------------	-------------

In place, include excavation if Roadway Excavation is not a bid item.

## **Price Adjustments for Strength**

C.

- A. When concrete is below specified strength:
  - 1. Department may accept item at a reduced price
  - 2. The pay factor will be applied to the portion of the item which is represented by the strength tests that fall below specified strength.
  - 3. Department will calculate the pay factor as follows:

Psi below specified	strength:	Pay Factor:
1 - 100	0.98	
101 - 200	0.94	
201 - 300	0.88	
301 - 400	0.80	
More than 400		0.50 or Engineer may reject

45	02788000*	Micro-surfacing	Square feet			
Measu	Measurement:					
A. N	A. Micro-surfacing: Include aggregates and all additives including asphalt binder.					

46	028910010	Relocation of Sign	Each	
In place, includes removal and disposal of existing concrete sign base.				

47	029120010	Contractor Furnished Topsoil	Square Yard
In place			

48	02922006*	Turf Sod	Square Feet			
In place	In place					
A. D	EPARTMENT will i	not pay separately for repair or replacement to sprinkler systems.				

49	02961001*	Rotomilling	Square Yard	l
----	-----------	-------------	-------------	---

50	03310000*	Construct Catch Basin	Each
Paymen	nt:		

- A. DEPARTMENT will not pay separately for reinforcing steel and associated work.
- B. DEPARTMENT will make no separate payment for excavation for structures.
- C. DEPARTMENT will pay separately for grate & frame.

## Price Adjustments for Strength

- When concrete is below specified strength:
  - 1. Department may accept item at a reduced price
  - 2. The pay factor will be applied to the portion of the item which is represented by the strength tests that fall below specified strength.
  - 3. Department will calculate the pay factor as follows:

Psi below specified strength:		Pay Factor:	
1 - 100	0.98		
101 - 200	0.94		
201 - 300	0.88		
301 - 400	0.80		
More than 400		0.50 or Engineer may re	ject

51 03310001* 5 ft Concrete Manhole	Each
------------------------------------	------

## Payment:

- DEPARTMENT will not pay separately for reinforcing steel and associated work.
- B. DEPARTMENT will make no separate payment for excavation for structures and sawcutting of pipes.
- C. DEPARTMENT will pay separately for grate & frame.

## Price Adjustments for Strength

- A. When concrete is below specified strength:
  - 1. Department may accept item at a reduced price
  - 2. The pay factor will be applied to the portion of the item which is represented by the strength tests that fall below specified strength.
  - 3. Department will calculate the pay factor as follows:

Psi below specified	strength:	Pay Factor:	
1 - 100	0.98		
101 - 200	0.94		
201 - 300	0.88		
301 - 400	0.80		
More than 400		0.50 or Engineer may reject	ct

52	02225001*	Asphalt Surfacing Removal (Structures)	Square yard
Removed			

53	03392001*	Penetrating Concrete Sealer	Foot
Cover to	otal surface area of e	ach parapet.	

54	03924001*	Structural Concrete Repair (Repair Bent)	Each
	U	rete and marking repair areas for approval by the Engineer crete as directed to restore it to a sound condition.	

55	03924002*	Structural Concrete Repair (Beam End Repair)	Each	
A. Includes sounding concrete and marking repair areas for approval by the Engineer				
B. Repair Structural Concrete as directed to restore it to a sound condition.				

56	03924003*	Structural Concrete Repair (Fence Posts Concrete)	Each
	U	rete and marking repair areas for approval by the Engineer crete as directed to restore it to a sound condition.	

57	03924004*	Structural Concrete Repair (Under Side Deck Overhang)	Each		
A. Includes sounding concrete and marking repair areas for approval by the Engineer					
B. Repair Structural Concrete as directed to restore it to a sound condition.					

58	03924005*	Structural Concrete Repair (Collision Repair)	Each
	_	rete and marking repair areas for approval by the Engineer crete as directed to restore it to a sound condition.	

59	03925000*	Polymer Overlay	Square Foot			
	A. Includes grinding to provide acceptable surface and match overlay into joints.  B. In place					

60	03934001*	Pothole Patching	Square Foot
Repair Pothol situati Depar	the actual quanti e patching may be ons occur, the pric	es are based on preliminary field review for bidding purposes only.  ties determined by the Engineer.  reduced, deleted, or increased over the bid quantities from the contract of the actual quantity will be paid for at the contract unit price.  w additional compensation for repairing blow throughs, or for removing	-
iancu	patenes.		
61	05831001*	Expansion Joint Modification (Sidewalk)	Foot
In plac	ee		
62	05831002*	<b>Expansion Joint Modification (Bridge Deck)</b>	Foot
In plac	ee		
63	05831003*	Expansion Joint Modification (Strip Seal Gland Replacement)	Foot
In plac	ee		
64	07925000*	Hot Poured Joint Seal	Foot
In plac	ee		
65	028910190	Sign Type P-2, 12 inch X 18 inch	Each
In plac	e		
66	02892000*	Remove and Salvage Existing Equipment	Lump sum
			•
67	028920001*	Traffic Signal System Clearfield - 300 N. & Main Street	Lump sum
to prov	ride a complete and	(other than State Furnished Items and Junction Boxes), labor, costs and worfully operational signal system. iated with power source hookup will be paid for by the DEPARTMENT.	

68	028920020	Installation of State Furnished Material	Lump sum
----	-----------	--	----------

				l
69	028920025	Installation of State Furnished Mast Arm Mounted Sign	Each	l

70 135540010 Polymer Concrete Junction Box Each	70	135540010	Polymer Concrete Junction Box	Each
---	----	-----------	-------------------------------	------

# XIV. PDBS Project Summary Report

# **Summary Report** Project: STP-0126(6)6

# SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

Detail 10 - ROADWAY	Alt Group Alt # Description 0 0		
Item Number	Description	Qty	Unit
012850010	Mobilization	1	Lump
013150010	Public Information Services	1	Lump
015540005	Traffic Control	1	Lump
01557000*	Maintenance of Traffic (MOT)	1	Lump
015720010	Dust Control and Watering	15,000	gal
01721001P	Survey	1	Lump
01892000*	Reconstruct Irrigation Diversion Box	1	Each
01892002*	Reconstruct Cleanout Box	3	Each
01892004*	Reconstruct Valve Box	11	Each
01892005*	Reconstruct Manhole	10	Each
01892006*	Reconstruct Monument Box	1	Each
020560020	Granular Borrow	375	Ton
02083000*	Relocate Fire Hydrant	1	Each
02221000*	Remove Light Pole	1	Each
02221001*	Remove and Salvage Monument	1	Each
02221002*	Remove Bus Bench	3	Each
02221003*	Remove Utility Box	1	Each
022210030	Remove Catch Basin	3	Each
022210095	Remove Pipe Culvert	55	ft
02222000P	Remove Concrete Sidewalk	485	sq yd
02222001P	Remove Concrete Driveway	450	sq yd
02222002P	Remove Concrete Curb and Gutter	1,000	ft
022220040	Remove Asphalt Pavement	425	sq yd
02316002*	Roadway Excavation (Plan Quantity)	650	cu yd
02319000*	Potholing for Utilities	12	Each
02610041*	12 inch Reinforced Concrete Pipe Culvert, Class B	135	ft
026350030	Manhole Frame and Solid Cover, Std Dwg GF 2	1	Each
026350040	Rectangular Grate And Frame (Bicycle Safe Grating) Std Dwg GF 3	4	Each
027050010	Asphalt Pavement Sawing	10,000	in-ft

3/18/2003 Page 1 of 3

# Summary Report Project: STP-0126(6)6

# SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

Detail		Alt Group Alt # Description		
10 - ROADW	AY	0 0		
	Item Number	Description		Unit
	027210070	Untreated Base Course 3/4 inch or 1 inch Max	400	Ton
	027410010	HMA Mix - 1/2 inch	1,040	Ton
	027480050	Emulsified Asphalt SS-1H	6	Ton
	02765002*	Pavement Message Paint	68	Each
	02765003*	Remove Pavement Markings	167	ft
	02765005*	Pavement Marking Paint	13	gal
	02771000*	Concrete Waterway	247	sq ft
	027710025	Concrete Curb and Gutter Type B1	912	ft
	027710045	Concrete Driveway Flared, 7 inch Thick	435	sq ft
	027710050	Concrete Driveway Open, 6 inch Thick	1,315	sq ft
	027710055	Concrete Driveway Open, 7 inch Thick	2,870	sq ft
	02771008*	Pedestrian Access Ramp Type E	1,002	sq ft
	02772000*	Pothole Patching	3,600	sq ft
	02776000*	Textured Concrete Flatwork 4 inch thick	860	sq ft
	027760010	Concrete Sidewalk	3,385	sq ft
	02788000*	Micro-Surfacing 6	6,000	sq ft
	028910010	Relocation of Sign	3	Each
	029120010	Contractor Furnished Topsoil	125	sq yd
	02922006*	Turf Sod	860	sq ft
	02961001*	Rotomilling	6,700	sq yd
	03310000*	Construct Catch Basin	4	Each
	03310001*	5 ft Concrete Manhole	1	Each
Detail	**************************************	Alt Group Alt # Description		
20 - STRUCT	Item Number	0 0 Description	Otv	Unit
	02225001*	Asphalt Surfacing Removal (Structures)	-	sq yd
	03392001*		2,850	
	03924001*	Structural Concrete Repair (Repair Bent)		Each
	03924002*	Structural Concrete Repair (Beam End Repair)		Each
		Structural Concrete Repair (Fence Posts Concrete)		
	03924003*	Structural Contrete Repair (Fence Posts Contrete)	10	Each

3/18/2003 Page 2 of 3

# Summary Report Project: STP-0126(6)6

# SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

Detail		Alt Group Alt # Description	
20 - STRUCT		0 0	
	Item Number	·	ty Unit
	03924004*	Structural Concrete Repair (Under Side Deck Overhang)	1 Each
	03924005*	Structural Concrete Repair (Collision Repair)	1 Each
	03925000*	Polymer Overlay 44,20	00 sq ft
	03934001*	Pothole Patching 7,00	00 sq ft
	05831001*	Expansion Joint Modification (Sidewalk)	6 ft
	05831002*	Expansion Joint Modification (Bridge Deck)	00 ft
	05831003*	Expansion Joint Modification (Strip Seal Gland Replacement)	00 ft
	07925000*	Hot Poured Joint Seal	60 ft
Detail 40 - SIGNING Item Number		Alt Group Alt # Description 0 0  Description	ty Unit
	028910190	Sign Type P-2, 12 inch X 18 inch	3 Each
Detail 50 - SIGNALS		Alt Group Alt # Description 0 0	5 Edon
	Item Number	Description	ty Unit
	02892000*	Remove and Salvage Existing Equipment	1 Lump
	02892001*	Traffic Signal System Clearfield - 300 N. & Main Street	1 Lump
	028920020	Installation of State Furnished Material	1 Lump
	028920025	Installation of State Furnished Mast Arm Mounted Sign	4 Each
	135540010	Polymer Concrete Junction Box	1 Each

3/18/2003 Page 3 of 3

XV. PDBS Detailed Stationing Summaries Report

Version: 1

#### SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Alt Group: 0 Alt #: 0

Item Number Description Use Qty Unit 01721001P Survey Lump Note # Note SURVEY to include surveying existing curb & gutter location from Sta. 2+40 to Sta. 5+50 (rt. side) prior to removals. 01892000\* **Reconstruct Irrigation Diversion Box** Each Line/Sheet From Station From Offset To Station To Offset Qty Comment Use Existing Frame and Cover RD-3 10+52.31 24.09 RT 1.0 1.0 01892002\* **Reconstruct Cleanout Box** 3 Each Line/Sheet From Station From Offset To Station To Offset Qty Comment Use Existing Frame & Cover RD-3 10+32.39 21.04 LT 1.0 RD-3 32.42 RT Use Existing Frame & Cover 19+86.22 1.0 RD-3 Use Existing Frame & Cover 19+87.32 12.60 RT 1.0 3.0 01892004\* **Reconstruct Valve Box** 11 Each Line/Sheet From Station From Offset To Station To Offset Qty Comment RD-2 5+87.85 36.46 LT 1.0 RD-2 6+17.48 22.37 LT 1.0 RD-3 10+44.98 16.08 LT 1.0 RD-3 10+49.79 15.94 LT 1.0 RD-3 10+57.58 21.16 LT 1.0 RD-3 10+60.63 3.05 LT 1.0 RD-3 11+04.79 21.58 LT 1.0 RD-3 19+67.63 42.17 LT 1.0 RD-3 20+35.35 19.12 LT 1.0 RD-3 20+37.00 45.81 LT 1.0 RD-3 9+42.65 18.62 LT 1.0 11.0

3/18/2003 For Information only Page 1 of 25

Version: 1

SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Alt Group: 0 Alt #: 0

Item Number Description		on			Use	Qty	Unit	
01892005*	Recon	struct Manho	le				10	Each
Line/Sheet	From Station	From Offset	To Station	To Offset	Qty	Comment		
RD-1	1+14.30	8.02 LT			1.0	Use Existing Frame & Cover		
RD-2	5+57.83	13.80 LT			1.0	Use Existing Frame & Cover		
RD-2	6+78.69	14.63 LT			1.0	Use Existing Frame & Cover		
RD-2	7+87.54	12.23 RT			1.0	Use Existing Frame & Cover		
RD-3	10+89.69	19.52 RT			1.0	Use Existing Frame & Cover		
RD-3	19+82.40	35.35 LT			1.0	Use Existing Frame & Cover		
RD-3	19+99.81	31.74 RT			1.0	Use Existing Frame & Cover		
RD-3	20+00.09	26.00 RT			1.0	Use Existing Frame & Cover		
RD-3	9+03.88	11.50 LT			1.0	Use Existing Frame & Cover		
RD-3	9+41.42	26.28 LT			1.0	Use Existing Frame & Cover		
				-	10.0			
Note #	Note							
1	There are 3 Q	west telephone	manholes.					
01892006*	Pacan	nstruct Monun	nont Boy				1	Each
						_	1	Lacii
		From Offset	To Station	To Offset	Qty	Comment		
RD-3	20+00.00	0.00 LT		_	1.0			
					1.0			

For Information only 3/18/2003 Page 2 of 25

Version: 1

## SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Item Numb	er	Descript					Jse Qty	
020560020	Granula	ar Borrow					375	Ton
Line/Sheet	From Station I	From Offset	To Station	To Offset	Qty	Comment		
RD-5	SOUTH SIDE				21.5	Under new asphalt		
RD-6	NORTH SIDE				31.9	Under new asphalt		
RD-6	SOUTH SIDE				47.3	Under new asphalt		
RD-7	NE				46.6	Under new asphalt		
RD-7	NW				71.1	Under new asphalt		
RD-7	SE				64.7	Under new asphalt		
RD-7	SW				43.2	Under new asphalt		
RD-8	NORTH SIDE				25.0	Under new asphalt		
					351.3			
Note # 1	Assumed Unit V			on typical section	n			
2	Depth of 12" un	der new aspr	iait as shown	on typical section				
02083000*		te Fire Hydra	ant	To Offset	Qty	Comment	1	Each
02083000*	Reloca From Station	te Fire Hydra	ant			Comment	1	Each
<b>02083000</b> * Line/Sheet	Reloca From Station	<b>te Fire Hydra</b> From Offset	ant		Qty	Comment	1	Each
<b>02083000*</b> Line/Sheet RD-3  Note # 1	Reloca From Station 1 10+61.53	te Fire Hydra From Offset 24.27 RT	ant		Qty 1.0	Comment	1	Each
<b>02083000*</b> Line/Sheet RD-3  Note # 1	Relocal From Station 1 10+61.53 2  Note Existing fire hyd	te Fire Hydra From Offset 24.27 RT	ant To Station		Qty 1.0	Comment	1	Each
02083000* Line/Sheet RD-3  Note # 1 1  02221000* Line/Sheet	Relocal From Station   10+61.53   Note Existing fire hyde Remov	te Fire Hydra From Offset 24.27 RT  drant is a 6".  e Light Pole From Offset	ant To Station		Oty 1.0 1.0 Qty	Comment		
02083000* Line/Sheet RD-3  Note # I 1 I	Relocal From Station   10+61.53   Note Existing fire hyde Remov	te Fire Hydra From Offset 24.27 RT drant is a 6".	ant To Station	To Offset	Qty 1.0 1.0			
02083000*  Line/Sheet RD-3  Note # 1 1 000000000000000000000000000000000	Relocal From Station   10+61.53   Note Existing fire hyde Remov	te Fire Hydra From Offset 24.27 RT  drant is a 6".  e Light Pole From Offset	ant To Station	To Offset	Oty 1.0 1.0 Qty			
02083000* Line/Sheet RD-3  Note # 1 1  02221000* Line/Sheet	Relocal From Station   10+61.53   2  Note Existing fire hyder Remove From Station   19+39.77   3	te Fire Hydra From Offset 24.27 RT drant is a 6".  The Light Pole From Offset 33.84 RT	ant To Station	To Offset	Qty 1.0 1.0 Qty 1.0			
02083000* Line/Sheet RD-3  Note # I 1 I  02221000* Line/Sheet RD-3	Relocal From Station   10+61.53   2  Note Existing fire hyder Remove From Station   19+39.77   3	te Fire Hydra From Offset 24.27 RT  drant is a 6".  e Light Pole From Offset 33.84 RT	ant To Station To Station	To Offset	Qty 1.0 1.0 Qty 1.0	Comment	1	Each
02083000* Line/Sheet RD-3  Note # I 1 I  02221000* Line/Sheet RD-3	Relocal From Station   10+61.53   Note Existing fire hyde Remov From Station   9+39.77   Remov From Station	te Fire Hydra From Offset 24.27 RT  drant is a 6".  e Light Pole From Offset 33.84 RT	ant To Station To Station	To Offset  To Offset	Qty 1.0  1.0  Qty 1.0  1.0	Comment	1	Each

Version: 1

## SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Alt Group: 0 Alt #: 0

Item Numb	oer	Descript	ion				Use Qty	Unit
02221002*	Remo	ve Bus Benc	h				3	Each
Line/Shee	t From Station	From Offset	To Station	To Offset	Qty	Comment		
RD-3	19+62.30	58.31 LT			1.0			
RD-3	19+67.73	42.74 RT			1.0			
RD-3	20+40.32	46.54 RT			1.0			
					3.0			
02221003*	Remo	ve Utility Box	(				1	Each
Line/Shee	t From Station	From Offset	To Station	To Offset	Qty	Comment		
RD-3	10+98.08	20.29 LT			1.0			
					1.0			
022210030	Remo	ve Catch Bas	sin				3	Each
Line/Shee	t From Station	From Offset	To Station	To Offset	Qty	Comment		
RD-3	10+52.41	17.92 LT			1.0			
RD-3	10+53.66	17.92 RT			1.0			
RD-3	20+37.67	32.16 RT			1.0			
					3.0			
022210095	Remo	ve Pipe Culv	ert				55	ft
Line/Shee	t From Station	From Offset	To Station	To Offset	Qty	Comment		
RD-3	10+30.07	21.19 LT	10+50.27	18.01 LT	16.51	12" pipe		
RD-3	10+32.42	13.92 RT	10+51.41	17.93 RT	19.41	12" pipe		
RD-3	20+21.57	32.86 RT	20+35.63	32.06 RT	16.04	12" squash cmp		
					51.96			

3/18/2003 \*\* For Information only Page 4 of 25

Version: 1

## SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Item Numb	er	Descript	tion			Use Qty Unit
02222000P	Remo	ve Concrete	Sidewalk			485 sq yd
Line/Sheet	t From Station	From Offset	To Station	To Offset	Qty	Comment
RD-2	5+05.02	25.99 RT	6+01.04	25.93 RT	40.71	
RD-2	6+03.92	40.32 RT	6+18.47	26.45 LT	11.5	
RD-2	6+39.58	25.36 RT	6+28.89	25.36	13.47	
RD-3	10+43.25	25.53 LT	10+62.21	25.73 LT	12.42	remove parkstrip material
RD-3	10+91.60	29.68 LT	11+53.04	29.76 LT	26.94	
RD-3	11+89.28	29.68 LT	12+00.00	29.67 LT	4.48	
RD-3	18+77.35	37.33 RT	19+71.14	37.44 RT	39.46	remove parkstrip material
RD-3	18+77.35	39.74 RT	19+79.66	42.36 RT	55.51	
RD-3	19+20.31	49.48 LT	19+28.99	50.12 LT	3.84	remove parkstrip material
RD-3	19+20.33	52.46 LT	19+28.98	52.56 LT	4.63	
RD-3	19+55.36	52.38 LT	9+30.34	29.26 RT	21.68	
RD-3	19+56.31	49.94 LT	19+63.78	45.37 LT	2.51	remove parkstrip material
RD-3	20+28.69	34.32 RT	20+47.38	37.34 RT	5.73	remove parkstrip material
RD-3	20+47.39	39.92 RT	10+62.19	27.74 LT	26.09	
RD-3	6+93.05	29.22 RT	8+00.00	29.53 RT	46.09	
RD-3	8+62.52	25.95 RT	8+82.54	26.03 RT	8.45	remove parkstrip material
RD-3	8+62.52	27.93 RT	8+82.54	28.12 RT	9.2	
RD-3	9+15.76	32.15 LT	20+88.81	52.88 LT	44.93	
RD-3	9+18.41	27.28 RT	9+39.70	23.76 RT	10.14	remove parkstrip material
RD-4	12+00.00	29.67 LT	12+57.36	29.47 LT	71.82	
RD-4	12+80.64	29.62 LT	13+24.60	29.74 LT	18.79	
					478.39	

SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Alt Group: 0 Alt #: 0

Item Numb	er	Descripti	on				Use Qty	Unit
02222001P	Remo	ve Concrete [	Driveway				450	sq yd
Line/Sheet	From Station	From Offset	To Station	To Offset	Qty	Comment		
RD-2	6+15.00	20.87 RT			41.6			
RD-2	6+37.89	26.31 LT			23.73			
RD-2	6+81.31	20.82 LT			33.97			
RD-3	10+77.1	18.52 LT			46.23			
RD-3	11+71.05	18.21 LT			55.41			
RD-3	18+76.04	32.69 RT			8.85			
RD-3	19+42.23	44.82 LT			40.0			
RD-3	20+48.01	32.87 RT			8.26			
RD-3	21+09.22	44.53 LT			62.35			
RD-3	8+45.35	21.06 RT			51.6			
RD-3	8+91.89	20.00 RT			24.75			
RD-4	12+71.00	16.90 LT			47.67			
				_	444.42			

Version: 1

#### Note # Note

Station & offset taken from center of driveway

Version: 1

#### SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Alt Group: 0

p: 0 Alt #: 0

Item Number Description Use Qty Unit 02222002P **Remove Concrete Curb and Gutter** 1,000 ft Line/Sheet From Station From Offset To Station To Offset Qty Comment RD-1 2+41.02 19.0 RT 2+67.20 18.9 RT 26.2 RD-1 2+91.95 18.7 RT 3+50.19 18.4 RT 58.22 RD-1 3+79.21 18.6 RT 4+00.00 18.0 RT 20.95 RD-2 4+00.00 18.00 RT 4+60.02 18.4 RT 60.02 RD-2 5+10.23 18.1 RT 5+94.94 18.2 RT 84.71 RD-2 19.9 LT 5+68.83 37.9 LT 27.95 5+51.38 RD-2 5+97.72 37.2 LT 6+23.47 19.8 LT 35.67 RD-2 6+35.84 6+62.91 27.07 18.3 RT 18.5 RT RD-2 82.45 6+52.42 19.7 LT 7+34.74 21.6 LT RD-2 6+99.74 18.5 RT 8+00.00 100.26 18.8 RT RD-3 10+58.00 19.28 LT 20+43.34 33.47 RT 42.07 RD-3 10+96.73 19.15 LT 11+48.72 19.33 LT 52.0 RD-3 11+94.26 18.98 LT 12+00.00 19.21 LT 5.66 RD-3 18+81.74 33.53 RT 10+70.73 25.48 RT 132.4 RD-3 21+35.03 45.38 LT 21+41.99 45.36 LT 6.96 RD-3 8+67.15 21.47 RT 8+77.07 21.65 RT 9.93 RD-3 9+15.68 25.28 LT 20+83.76 45.48 LT 89.26 RD-3 9+32.20 23.03 RT 19+62.48 45.23 LT 43.0 RD-4 52.64 12+00.00 19.21 LT 12+52.55 19.15 LT RD-4 12+85.96 19.23 LT 13+24.52 19.24 LT 38.56 995.98 022220040 **Remove Asphalt Pavement** 425 sq yd Line/Sheet From Station From Offset To Station To Offset Qty Comment RD-1/2 2+41.01 16.5 RT 4+59.99 15.95 RT 48.66 RD-2 18.0 RT 7+34.96 40.82 5+51.31 19.6 LT RD-2 5+68.81 37.9 LT 5+97.63 37.2 LT 11.6 RD-2/3 5+10.22 15.8 RT 19+20.35 40.0 LT 125.7 RD-3 35.79 18+71.64 29.52 RT 10+70.71 21.65 RT RD-3 57.55 9+15.64 19.96 LT 21+41.79 41.28 LT RD-3/4 20+52.81 28.0 RT 13+24.50 15.33 LT 82.9 403.02

SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Alt Group: 0 Alt #: 0

Item Numb	per Descript	ion			Use Qty Unit
02316002*	Roadway Excavation	on (Plan Quar	ntity)		650 cu yd
Line/Sheet	t From Station From Offset	To Station	To Offset	Qty	Comment
				9.1	for concrete waterway
				21.7	for pedestrian access ramp
				50.0	for curb and gutter
				99.8	for driveways
				18.5	for textured concrete flatwork
				30.0	for sidewalks
RD-5	SOUTH SIDE			23.6	for widening of roadway
RD-6	NORTH SIDE			35.0	for widening of roadway
RD-6	SOUTH SIDE			51.9	for widening of roadway
RD-7	NE			51.2	for widening of roadway
RD-7	NW			78.0	for widening of roadway
RD-7	SE			71.0	for widening of roadway
RD-7	SW			47.4	for widening of roadway
RD-8	NORTH SIDE			27.5	for widening of roadway
			-	614.7	

Version: 1

#### Note # Note

depth of 24" for roadway depth of 10" for curb and gutter depth of 7" for textured concrete flatwork, sidewalk & ped ramp depth of 9" for driveway and depth of 12" for concrete waterway

02319000*	Potho	ling for Utiliti	es			12 Each
Line/Sheet	From Station	From Offset	To Station	To Offset	Qty	Comment
ALL					10.0	Contingency, as directed by ENGINEER
RD-7	19+81.3	49.8			1.0	Telephone line at SD Crossing
RD-7	20+42.9	35.7			1.0	Telephone line at SD Crossing
					12.0	

Note # Note

1 Pothole telephone lines prior to ordering manholes, to assure 36" depth. Sta. for new SD line crossing btel lines

Version: 1

SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Alt Group: 0 Alt #: 0

Item Numb	oer	Descript	ion				Use Qty	Unit
02610041*	12 inc	h Reinforced	Concrete Pip	e Culvert, Clas	s B		135	ft
Line/Shee	t From Station	From Offset	To Station	To Offset	Qty	Comment		
RD-7	10+33.27	14.18 RT	10+66.57	24.18 RT	33.8			
RD-7	10+34.07	21.25 LT	10+52.18	19.68 LT	18.17			
RD-7	20+22.16	32.27 RT	20+40.67	32.23 RT	18.51			
RD-7	20+42.63	13.01 RT	20+43.15	50.94 LT	62.21			
					132.69			
Note #								
1	Use Class V S	Strength of pipe	Э					
026350030	Manh	ole Frame and	d Solid Cover	, Std Dwg GF 2	!		1	Each
Line/Shee	t From Station	From Offset	To Station	To Offset	Qty	Comment		
RD-7	20+42.63	13.01 RT			1.0			
					1.0			
026350040	Recta	ngular Grate	And Frame (E	Bicycle Safe Gra	ating) Std Dwg (	GF 3	4	Each
Line/Shee	t From Station	From Offset	To Station	To Offset	Qty	Comment		
RD-7	10+54.21	19.4 LT			1.0			
RD-7	10+68.73	24.12 RT			1.0			
RD-7	20+42.59	32.09 RT			1.0			
RD-7	20+43.39	51.75 LT			1.0			
					4.0			

For Information only 3/18/2003 Page 9 of 25

## SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Item Number

Alt Group: 0

Alt #: 0

Use Qty Unit Description

Version: 1

027050010	Aspha	ilt Pavement S	Sawing				10,000	in-ft
Line/Sheet	From Station	From Offset	To Station	To Offset	Qty	Comment		
RD-1	2+41.02	18.5 RT	4+00.00	16.1	974.8			
RD-2	4+00	16.1 RT	4+60.00	18.0 RT	371.2			
RD-2	5+10.22	17.8 RT	8+00.00	16.8 RT	1,752.0			
RD-2	5+51.31	20.0 LT	7+34.71	21.6 LT	1,127.7			
RD-2	5+68.81	37.9 LT	5+97.63	37.2 LT	313.1			
RD-3	18+71.55	31.02 RT	10+70.72	23.32 RT	978.06			
RD-3	20+22.38	35.32 RT	12+00.00	14.65 LT	1,026.36			
RD-3	20+22.90	34.77 RT	20+52.80	31.13 RT	228.72			
RD-3	8+00.00	16.80 RT	19+14.37	42.93 LT	1,285.8			
RD-3	9+15.66	22.78 LT	21+41.89	42.69 LT	1,053.3			
RD-4	12+00.00	14.65 LT	13+24.51	16.79 LT	777.96			
				-	9,889.0			

#### Note # Note

Assumed average depth of existing asphalt = 6 inches

SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

Version: 1

10 - ROADWAY

Alt Group: 0 Alt #: 0

Item Numb	Item Number Description			Use Qty Unit
027210070	Untreated Base Course 3/4 inc	h or 1 inch Max		400 Ton
Line/Shee	t From Station From Offset To Station	To Offset	Qty	Comment
			65.1	under concrete driveway
			15.5	under textured concrete flatwork
			41.4	under concrete sidewalk
			8.9	under waterway
			18.2	under pedestrian access ramp
			40.0	under concrete curb and gutter
RD-5	SOUTH SIDE		11.5	under new asphalt
RD-6	NORTH SIDE		17.1	under new asphalt
RD-6	SOUTH SIDE		25.4	under new asphalt
RD-7	NE COR		25.1	under new asphalt
RD-7	NW COR		38.2	under new asphalt
RD-7	SE COR		34.8	under new aspahlt
RD-7	SW COR		23.2	under new asphalt
RD-8	NORTH SIDE		13.5	under new asphalt
		-	377.9	

#### Note # Note

<sup>1</sup> Assumed Unit Weight = 145 pcf

Depth under asphalt and waterway = 6 inches Depth under textured flatwork, curb & gutter, sidewalk, pedestrian ramps, and driveways = 3 inches

<sup>3</sup> In areas of curb & gutter and sidewalk replacement at same elevation as existing, full depth of UTBC may not be needed.

Version: 1

## SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Item Num	per Description		Use Qty Unit
027410010	HMA Mix - 1/2 inch		1,040 Ton
Line/Shee	t From Station From Offset To Station To Offset	Qty 836.5	Comment 2" Overlay
RD-5	SOUTH SIDE	8.2	4" New Asphalt under overlay
RD-6	NORTH SIDE	12.2	4" New Asphalt under overlay
RD-6	SOUTH SIDE	18.1	4" New Asphalt under overlay
RD-7	NE	10.1	4" New Asphalt under overlay
RD-7	NORTH SIDE	11.6	6" Thick
RD-7	NW	27.2	4" New Asphalt under overlay
RD-7	PARKSTRIP	17.5	3" Asphalt around signal, utiltiy poles, and behind sidew
RD-7	SE	24.8	4" New Asphalt under overlay
RD-7	sw	16.5	4" New Asphalt under overlay
RD-8	NORTH SIDE	14.4	6" Thick
		997.1	
Note #	Note Average Depth = 2" for Overlay		
2	Depth of asphalt = 4 inches under overlay		
3	Number of Gyrations: Nini=8 Ndes=100 Nmax=160 PG 64-34 Asphalt Assumed Unit Weight = 155 pcf		
027480050	Emulsified Asphalt SS-1H		6 Ton
	t From Station From Offset To Station To Offset	Qty	Comment
ALL		5.5	Approx. 7200 sq. yd.
		5.5	
Note # 1	Note Application Rate = 1/5 gal per sq. yd.		

- Paid for diluted 1:1 with Suppliers Certified Weigh Tickets
- Assumed Unit Weight = 7.6 lbs/gal 3

Version: 1

## SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Alt Group: 0 Alt #: 0

Item Numb	er	Descript	ion				Use Qty	Unit
02765002*	Pavem	nent Message	Paint				68	Each
Line/Sheet	From Station	From Offset	To Station	To Offset	Qty	Comment		
300 N	10+47.32		10+51.88		8.0	Crosswalk		
300 N	10+51.48		10+53.82		2.0	Stop Bar		
300 N	10+56.95		11+48.23		6.0	Arrow		
300 N	8+38.78		9+30.22		6.0	Arrow		
300 N	9+33.19		9+36.28		2.0	Stop Bar		
300 N	9+34.75		9+40.47		8.0	Crosswalk		
MAIN	18+74.50		19+43.53		2.0	ARROW		
MAIN	19+54.61		19.57.05		4.0	Stop Bar		
MAIN	19+58.51		19+62.76		12.0	Crosswalk		
MAIN	20+34.35		20+41.24		12.0	Crosswalk		
MAIN	20+41.11		20+45.09		4.0	Stop Bar		
MAIN	20+58.60		21+17.70		2.0	ARROW		
					68.0			
02765003*	Remov	ve Pavement	Markings				167	ft
Line/Sheet	From Station	From Offset	To Station	To Offset	Qty	Comment		
RD-3	11+00.00	6.43 LT	11+05.91	6.32 LT	5.91			
RD-3	11+00.00	3.18 RT	12+00.00	1.06 LT	100.17			
RD-4	12+00.00	1.06 LT	12+60.12	1.28 LT	60.14			
					166.22			

For Information only 3/18/2003 Page 13 of 25

Version: 1

#### SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Alt Group: 0

Alt #: 0

Item Number Description Use Qty Unit 02765005\* **Pavement Marking Paint** 13 gal Qty Line/Sheet From Station From Offset To Station To Offset Comment 406.99 FT - F 300 N -0+06.99 4+00 2.51 300 N 0+90.68 1+31.02 0.25 40.33 FT - B 40.33 FT - B 300 N 0+91.02 1+31.35 0.25 100.00 FT - B 300 N 10+52.69 11+52.69 0.62 300 N 10+53.82 12+00.00 0.91 146.21 FT - F 62.69 FT - F 300 N 12+00.00 12+62.69 0.39 20.00 FT - F 300 N 12+42.69 12+62.69 0.12 71.18 FT - F 300 N 12+62.69 13+33.72 0.44 18.98 FT - F 300 N 13+33.72 13+52.69 0.12 300 N 4+00.00 5+58.80 0.98 158.8 FT - F 7.39 FT - F 300 N 6+09.73 6+17.12 0.05 107.5 FT - F 7+24.62 300 N 6+17.12 0.66 20.00 FT - F 300 N 7+23.45 7+44.54 0.13 7+44.62 21.20 FT - F 300 N 7+24.62 0.13 55.42 FT - F 300 N 7+44.54 8+00.00 0.34 133.23 FT - F 300 N 8+00.00 9+33.19 0.82 300 N 8+34.54 9+34.54 0.62 100.00 FT - B 44.30 FT - D MAIN 18+71.58 19+15.87 0.04 84.86 FT - B MAIN 18+71.60 19+56.46 0.52 19+57.05 0.53 85.44 FT - F MAIN 18+71.61 86.02 FT - D 19+57.65 0.07 MAIN 18+71.63 43.02 FT - B MAIN 19+12.24 19+55.26 0.27 40.00 FT - B MAIN 19+15.87 19+55.87 0.25 101.66 FT - D MAIN 20+40.11 21+41.77 0.08 100.69 FT - F MAIN 20+41.11 21+41.79 0.62 99.81 FT - B MAIN 20+42.01 21+41.82 0.62 MAIN 20+42.98 20+82.98 0.25 40.00 FT - B 20+92.93 498.00 FT - B MAIN 20+43.94 0.3 58.87 FT - D MAIN 20+82.98 21+41.85 0.05

12.94

Version: 1

#### SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

Note # Note

1 **LEGEND** 

B = 8" SOLID WHITE
D = 4" SKIP WHITE
F = 4" SOLID DOUBLE YELLOW

2 CONVERSION

B = 162 FT/GAL D = 1260 FT/GAL

F = 162 FT/GAI

02771000\* 247 sq ft **Concrete Waterway** 

Line/Sheet From Station From Offset To Station To Offset Qty Comment

RD-6 5+52.0 20.0 LT 6+15.0 19.8 LT 246.6

246.6

# For Information only 3/18/2003 Page 15 of 25

Version: 1

## SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Alt Group: 0 Alt #: 0

Item Numb	er	Descript	tion				Use Qty Unit
027710025	Conc	rete Curb and	Gutter Type	B1			912 ft
Line/Shee	t From Station 2+41.02	From Offset 21.00 RT	To Station 2+67.25	To Offset 20.94 RT	Qty 26.23	Comment	
RD-5	2+92.02	20.87 RT	3+50.33	20.73 RT	58.31		
RD-5	3+79.22	20.66 RT	4+00.00	20.60 RT	20.78		
RD-6	4+00.00	20.60 RT	4+60.00	20.45 RT	60.0		
RD-6	5+10.23	20.33 RT	5+95.23	20.53 RT	85.0		
RD-6	5+51.31	22.48 LT	5+66.31	37.87 LT	27.95		
RD-6	6+00.13	37.17 LT	6+23.39	22.24 LT	35.64		
RD-6	6+45.58	20.79 RT	6+62.89	20.89 RT	17.31		
RD-6	6+52.37	22.16 LT	7+34.40	24.10 LT	82.48		
RD-6	6+99.45	20.75 RT	8+00.00	21.30 RT	100.55		
RD-7	10+47.52	23.05 LT	10+57.80	20.56 LT	9.66		
RD-7	10+52.39	30.74 RT	10+70.73	25.49 RT	19.32		
RD-7	10+96.26	20.50 LT	11+47.74	20.48 LT	51.48		
RD-7	11+94.22	20.19 LT	12+00.00	20.15 LT	5.68		
RD-7	18+82.88	34.26 RT	19+58.13	41.28 RT	76.26		
RD-7	19+14.35	45.43 LT	19+20.31	45.48 LT	5.96		
RD-7	20+34.37	36.14 RT	20+44.88	33.51 RT	10.92		
RD-7	20+41.68	54.41 LT	20+86.96	48.89 LT	46.31		
RD-7	21+34.73	45.87 LT	21+41.99	45.36 LT	7.29		
RD-7	8+00.00	21.30 RT	8+17.90	21.39 RT	17.9		
RD-7	9+05.24	22.55 RT	9+40.49	25.96 RT	37.28		
RD-7	9+15.68	25.28 LT	9+34.23	30.44 LT	19.51		
RD-8	12+00.00	20.15 LT	12+51.74	19.82 LT	51.84		
RD-8	12+86.82	19.6 LT	13+24.52	19.36 LT	37.7		
					911.36		
027710045	Conc	rete Driveway	Flared, 7 in	ch Thick			435 sq ft
Line/Shee	t From Station	From Offset	To Station	To Offset	Qty	Comment	
RD-7	21+13.80	47.35 LT			434.76		
					434.76		

# For Information only 3/18/2003 Page 16 of 25

Stationing is at a point on the back of curb in the center of the driveway.

Version: 1

## SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Alt Group: 0 Alt #: 0

NOADWAI		Ait Group.	υ Αιι <del>π</del> . υ					
Item Numb	er	Descript	ion				Use Qty	Unit
027710050	Conci	rete Driveway	Open, 6 incl	n Thick			1,315	sq ft
Line/Sheet RD-5	From Station 2+79.50	From Offset 20.90 RT	To Station	To Offset	Qty 138.49	Comment		
RD-5	3+64.70	20.69 RT			174.32			
RD-6	6+20.27	20.66 RT			471.78			
RD-6	6+37.88	22.20 LT			215.85			
RD-6	6+81.40	20.82 RT			311.04			
					1,311.48			
Note #   1   1   1   1   1   1   1   1   1	Stationing is a	·	e back of the c		of the driveway.		2,870	sq ft
		From Offset	-	To Offset	Qty	Comment	_,	-4
RD-7	10+77.61	20.50 LT	· o Gianon		390.75			
RD-7	11+70.96	20.33 LT			482.26			
RD-7	18+77.32	33.40 RT			81.73			
RD-7	19+41.12	45.14 LT			404.66			
RD-7	20+49.23	33.02 RT			40.55			
RD-7	8+61.58	21.46 RT			864.5			
RD-8	12+69.07	19.71 LT			604.2			
					2,868.65			
Note #		t a point on the	e back of curb	in the center of t				
02771008*	Pedes	strian Access	Ramp Type E	<u> </u>			1,002	sq ft
		From Offset	To Station	To Offset	Qty	Comment		
RD-6	5+62.06	27.01 LT			159.73			
RD-6	6+04.58	26.59 LT			154.73			
RD-7	19+60.95	49.80 RT			142.28			
RD-7	19+66.02	56.04 LT			191.01			
RD-7	20+31.04	44.12 RT			186.28			
RD-7	20+38.63	62.60 LT			167.97			

1,002.0

SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Alt Group: 0 Alt #: 0

Item Numb	er	Descripti	ion				Use Qty	Unit	
02772000*	Potho	le Patching					3,600	sq ft	
Line/Sheet RD-2/3	From Station 7+50.00	From Offset	To Station 9+34.00	To Offset	Qty 3,310.0 3,310.0	Comment			
02776000*	Textu	red Concrete	Flatwork 4 inc	ch thick			860	sq ft	
Line/Sheet	From Station	From Offset	To Station	To Offset	Qty	Comment			
RD-6	6+39.58	25.36 RT	6+68.88	25.36 RT	115.32				
RD-6	6+93.72	25.36 RT	8+80.00	25.40 RT	467.71				
RD-7	19+26.31	49.98 LT	19+20.31	49.93 LT	18.79				
RD-7	8+80.00	25.40 RT	8+23.44	25.83 RT	96.42				
RD-7	8+99.39	26.60 RT	9+38.50	27.89 RT	157.46				
					855.7				
Note #	Note								

Version: 1

#### Note # Note

Use "Brick Red" coloring and "New Brick Herringbone" pattern.

Version: 1

## SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Item Numb	er	Descript	ion				Use Qty	Unit
027760010	Conc	rete Sidewalk					3,385	sq ft
Line/Sheet	From Station	From Offset	To Station	To Offset	Qty	Comment		
RD-6	5+05.02	29.40 RT	6+01.59	29.34 RT	344.59			
RD-6	6+38.91	29.38 RT	6+69.59	29.39 RT	121.91			
RD-6	6+93.05	29.22 RT	8+00.00	29.52 RT	406.9			
RD-7	10+54.58	30.09 LT	10+62.71	29.75 LT	50.06			
RD-7	10+56.99	35.33 RT	10+70.74	31.77 RT	105.83			
RD-7	10+91.60	29.68 LT	11+53.04	29.76 LT	242.5			
RD-7	11+89.28	29.68 LT	12+00.00	29.67 LT	40.3			
RD-7	18+76.81	42.45 RT	16+53.56	45.89 RT	534.02			
RD-7	19+20.32	54.93 LT	19+26.73	54.92 LT	31.57			
RD-7	20+41.18	42.95 RT	20+51.25	41.74 RT	69.1			
RD-7	20+46.97	59.94 LT	20+91.98	54.93 LT	291.15			
RD-7	8+00.00	29.52 RT	8+24.14	29.58 RT	91.0			
RD-7	8+98.59	30.78 RT	9+34.13	32.13 RT	153.81			
RD-7	9+15.75	34.13 LT	9+28.24	36.85 LT	82.46			
RD-8	12+00.00	29.67 LT	12+57.36	29.47 LT	646.34			
RD-8	12+80.64	29.62 LT	13+24.60	29.74 LT	169.14			
					3,380.68			
Note #	Note Depth = 4 inch	nes						
)2788000*	Micro	-Surfacing					66,000	sq ft
	From Station	From Offset	To Station	To Offset	Qty	Comment		
ALL					64,758.0			
					64,758.0			
)28910010	Reloc	ation of Sign					3	Each
		From Offset	To Station	To Offset	Qty	Comment		
RD-3	18+84.83	35.95 RT			1.0	Behind New Sidewalk		
RD-3	19+07.85	35.57 RT			1.0	Behind New Sidewalk		
RD-3	19+50.74	35.39 RT			1.0	Behind New Sidewalk		

Version: 1

## SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Item Numb	per	Descript	tion				Use Qty	Unit
029120010	Contr	ractor Furnish	ed Topsoil				125	sq yd
Line/Shee RD-5/6	t From Station	From Offset	To Station	To Offset	Qty 84.5	Comment		
RD-7					6.5			
RD-8					29.7			
					120.7			
Note #	Note Depth = 4 incl	hes						
2	Assumed 1' b Assumed enti	ehind curb (if r re area betwee	no sidewalk re en curb and si	placement), as dewalk replacer	necessary. nent.			
02922006*	Turf S	Sod					860	sq ft
		From Offset		To Offset	Qty	Comment		
RD-5/6	2+41.02	21.00 RT	4+14.97	20.57 RT	142.0			
RD-6	5+44.60	20.24 RT	6+01.02	25.57 RT	285.0			
RD-6	6+11.78	22.69 LT	7+34.40	24.10 LT	105.0			
RD-7	9+15.68	25.28 LT	9+33.18	29.89 LT	58.6			
RD-8	12+81.15	25.84 LT	13+24.52	19.36 LT	267.3			
Note #	Assumed 1' b	ehind curb (if r re area betwee	no sidewalk re en curb and si	placement), as dewalk replacer	857.9 necessary. nent.			
2	As necessary	, repair or repla	ace sprinkler s	system.				
02961001*	Rotoi	milling					6,700	sq yd
Line/Shee	t From Station	From Offset	To Station	To Offset	Qty	Comment		
ALL					6,658.0			
					6,658.0			
Note # 1	Note Average Dept	h = 1-1/2"						
_	Sta. 8+00 to S Depth = 3" at Depth = 1-1/2		r					

SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

10 - ROADWAY

Alt Group: 0

Alt #: 0

•	NOADIIA.		Ait Oloup.	- Alt #. 0				
	Item Numl	ber	Descript	ion			Use Qty	Unit
	03310000*	Const	ruct Catch Ba	asin			4	Each
	Line/Shee	t From Station	From Offset	To Station	To Offset	Qty	Comment	
	RD-7	10+54.21	19.40 LT			1.0	STD. DWG. CB-1 LINE 3	
	RD-7	10+68.73	24.12 RT			1.0	STD. DWG. CB-1 LINE 4	
	RD-7	20+42.59	32.09 RT			1.0	STD. DWG. CB-1 LINE 3	
	RD-7	20+43.39	51.75 LT			1.0	STD. DWG. CB-1 LINE 3	
						4.0		
	Note #	Note						
	1	This item inclu	ides installation	n of catch basi	in box (concrete	& rebar), grate a	nd frame in the curb and gutter.	
	2	Grate and Fra	me paid for se	parately.				

Version: 1

03310001*	5 ft Co	5 ft Concrete Manhole							
Line/Sheet	From Station	From Offset	To Station	To Offset	Qty	Comment			
RD-7	20+42.63	13.01 RT			1.0				
					1.0				

#### Note # Note

- Cut existing pipe and connect to as per Section 02610.
- 2 This item includes installation of manhole (concrete & rebar), frame and cover.
- Frame and cover paid for separately. 3
- Verify existing pipe depth and pothole telephone lines prior to ordering manholes. 4

## SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

Version: 1

20 - STRUCTURES

Item Numbe	er Descrip	tion				Use Qty	Unit
02225001*	Asphalt Surfacing	Removal (Str	uctures)			450	sq yd
	From Station From Offset APPROACH SLAB	To Station	To Offset	Qty 450.0 450.0	Comment		
				450.0			
03392001*	Penetrating Concr	ete Sealer				2,850	ft
	From Station From Offset	To Station	To Offset	Qty	Comment		
	PARAPETS			2,850.0			
	STAIRWAYS			200.0			
				3,050.0			
03924001*	Structural Concret	e Repair (Rep	pair Bent)			3	Each
Line/Sheet	From Station From Offset	To Station	To Offset	Qty	Comment		
	BENT 8			1.0			
	BENT 3			1.0			
	BENT 6			1.0			
				3.0			
03924002*	Structural Concret	e Repair (Bea	am End Repair)			12	Each
Line/Sheet	From Station From Offset	To Station	To Offset	Qty	Comment		
	BENTS 3,6,8			12.0			
				12.0			
03924003*	Structural Concret	e Repair (Fen	ice Posts Concr	ete)		10	Each
Line/Sheet	From Station From Offset	To Station	To Offset	Qty	Comment		
	BENTS 2,8			10.0			
				10.0			
03924004*	Structural Concret	e Repair (Und	der Side Deck O	verhang)		1	Each
Line/Sheet	From Station From Offset	To Station	To Offset	Qty	Comment		
	BENT 8			1.0			
				1.0			

Version: 1

## SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

20 - STRUCTURES

Item Number	Descript	ion			Use Qty	Unit
03924005*	Structural Concrete	Repair (Coll	ision Repair)		1	Each
Line/Sheet F	rom Station From Offset	To Station	To Offset	Qty	Comment	
N	IEAR BENT			1.0	Bottom of beam and web south we	st side near Bent 8
				1.0		
03925000*	Polymer Overlay				44,200	sq ft
Line/Sheet F	rom Station From Offset	To Station	To Offset	Qty	Comment	·
SIDE W	VALK AND STEPS			2,700.0		
BRIDGE	DECK AND APPROACH			41,500.0		
				44,200.0		
03934001*	Pothole Patching				7,000	sq ft
Line/Sheet F	rom Station From Offset	To Station	To Offset	Qty	Comment	·
				7,000.0	Approximately 20% of Deck	
				7,000.0		
05831001*	Expansion Joint Mo	odification (S	idewalk)		16	ft
Line/Sheet F		To Station	To Offset	Qty	Comment	
S	IDEWALK BENT2,3	BENT 6,8		16.0	Replace Expansion Joints in Sidew	alk
				16.0		
05831002*	Expansion Joint Mo	odification (B	ridae Deck)		90	ft
	rom Station From Offset	•	To Offset	Qty	Comment	
В	ENT 3,6,8			0.0	Replace Strip Seal Gland in Deck (	See Detail)
				0.0		
			. <b></b> . <u>-</u>			
05831003*	Expansion Joint Mo		-			ft
	rom Station From Offset ENT 3,6,8	10 Station	To Offset	Qty	Comment See Strip Seal Gland Replacement	Detail
	0,0,0			0.0		

SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

20 - STRUCTURES

Alt Group: 0 Alt #: 0

 Item Number
 Description
 Use Qty
 Unit

 07925000\*
 Hot Poured Joint Seal
 60 ft

Line/Sheet From Station From Offset To Station To Offset Qty Comment

EAST APPR 30.0 Joint at East Approach Slab

WEST APPR 30.0 Joint at West Approach Slab

60.0

Version: 1

Note # Note

1 Rebuild Joint and Seal (See Hot Pored Joint Seal Detail)

3/18/2003 \*\* For Information only Page 24 of 25

SR-126; MAIN ST. AT 300 NORTH, CLEARFIELD

40 - SIGNING Alt Group: 0 Alt #: 0

Item Numb	er	Descript	ion				Use Qty	Unit	
028910190	Sign 1	Гуре Р-2, 12	inch X 18 inc	ch			3	Each	
Line/Sheet	From Station	From Offset	To Station	To Offset	Qty	Comment			
SS-3	11+25.01	21.81 LT			1.0	Aux. Sign Type P-2, R8-3			
SS-3	19+21.79	43.51 RT			1.0	Aux. Sign Type P-2, R8-3			
SS-3	20+73.85	56.25 LT			1.0	Aux. Sign Type P-2, R8-3			
					3.0				

Version: 1

3/18/2003 \*\* For Information only Page 25 of 25

## XVI. Special Provisions

#### SECTION 00555 M

#### PROSECUTION AND PROGRESS

#### PART 1 GENERAL

Delete line "C" of paragraph 1.3 "Notice To Proceed," and replace with the following:

C. Contract time will begin at least 10 days after Notice To Proceed, but starting of time may be delayed pending coordination of Utility Relocation and Right of Way issues at the discretion of the Engineer. Some Utility relocation work will be ongoing during construction.

Delete line "B" of paragraph 1.5 "Progress Schedules," and replace with the following:

B. Critical Path Method (CPM) Schedule is not required. Submit a detailed work schedule prepared by the CONTRACTOR.

Add the following to paragraph 1.12, Limitation of Operations

- D. Notify affected utilities (listed on sheet 1-E) upon receiving Notice to Proceed.
- E. Right-of-way to be staked immediately after notice to proceed to allow for utilities to be relocated.
- F. Complete the project within 70 working days.
- G. Contract time will not be extended for items that are not ordered within 2 weeks of receiving Notice to Proceed.

#### SECTION 00725 M

#### SCOPE OF WORK

#### PART 1 GENERAL

Add the following to paragraph 1.8, Maintaining Traffic - General:

- F. Closure of roadways will not be allowed except one way traffic will be allowed 24 hours a day during concrete work on Structure F-330. Portable traffic signals will be required.
- G. Use message boards as per approved MOT Plan and "Do Not Block Intersection " signs on SR-126 to warn of restriction and delays on SR-107 and to prevent backup of Westbound traffic into the SR-126 intersection.
- H. All lanes of traffic to be maintained during peak hours on SR-126. Such time being between the hours of 7:00 a.m. & 9:00 a.m. and 3:00 p.m. & 6:30 p.m. Monday through Friday. With field experience, peak hour may be adjusted by the ENGINEER.

Add the following paragraph to Part 1, General:

#### 1.23 PROJECT DESCRIPTION

- A. The project is an Intersection Improvement/ Hazard Elimination project that will include widening of the roadway with curb, gutter, sidewalk, textured concrete parkstrip and asphalt. The existing signals will be replaced with a new signal system. The existing signal is to remain operational until new system is functioning.
- B. Also included are preservation repairs to Structure F-330 on SR-107 to include Pothole Patching, various structure repairs an a Polymer Deck Overlay.

#### SECTION 00727 M

#### CONTROL OF WORK

#### PART 1 GENERAL

Add the following to paragraph 1.7, Cooperation With Utilities:

H. Utah Power/ Pacificorp will be removing, relocating, and installing 6 poles at the following approximate locations:

<u>SR-126</u> <u>SR-107 (300 N)</u> Sta. 19+58, Lt. (NEW) Sta. 10+83, Rt.

Sta. 19+67, Rt. Sta. 12+36, Lt. (NEW)

Sta. 20+32, Rt. Sta. 20+45, Lt.

Contact Kent Schlehuber at (801) 629-4328 to coordinate schedules for the work.

- I. Electric Light Wave will be relocating their facilities in conjunction with Utah Power/Pacificorp's relocation work at the above locations. Contact Shauna Jones at (801)924-6674.
- J. XO Communications will be relocating their facilities in conjunction with Utah Power/ Pacificorp's relocation work at the above locations. Contact Kirk Hansen at (801)983-1903.
- K. Qwest Corporation will be relocating their facilities in conjunction with Utah Power/ Pacificorp's relocation work at the above locations. Contact Jeff Stapley at (801) 974-8150. Qwest also has some lines that will be underneath the storm drain lines. Pothole prior to placing manholes and boxes to verify depth. Approximate depth is 36".
- L. Contact Scott Hodge of Clearfield City at (801) 525-2788 10 days prior to working around storm drain, water lines and sewer lines.

Control of Work 00727M - 1 of 2

- M. Contact Kyle Secretan of Questar at (801) 324-3389 10 days prior to working around gas lines. There are some gas lines that are underneath the roadway improvements. Pothole and expose by hand prior to preparing subgrade. Use care and caution when working over and around these lines. Approximate depth is 30".
- N. Contact Ben Thurgood of Clearfield Irrigation Company at (801) 825-1772 10 days prior to working around irrigation lines. Coordinate with them to expose irrigation box in parkstrip in the southwest corner.
- O. Contact Wendell Zaugg of Home & Garden Irrigation Company at (801)825-8268 10 days prior to working around irrigation lines. (South side of 300 North only)
- P. Contact Mark Anderson of Weber Basin Water Conservancy District at (801) 771-1677 10 days prior to working around Weber Basin water lines.
- Q. Pacific Communication will be relocating the telephone booth located at approx. Sta. 20+40 Rt. Coordinate with Gary Griggs at 1-800-736-1040 ext. 414.
- R. These anticipated utility adjustment descriptions are included for your information and assistance in scheduling work with the utility companies. Additional utility conflicts and adjustments may be encountered during construction.
- S. Attend a Utility Meeting, separate from the Preconstruction Conference, with the Utility Company representatives prior to beginning work on the project.

#### SECTION 01284S

#### PROMPT PAYMENT

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

This Section applies to prime Contractors, all subcontractors, all service providers and all material suppliers, and any lower tier subcontractors, service providers, and suppliers.

## 1.2 PROMPT PAYMENT TO SUBCONTRACTORS, MATERIAL SUPPLIERS AND SERVICE PROVIDERS - PROGRESS PAYMENTS

- A. Include in subcontract, service or purchase agreement language agreeing to pay as promptly as or sooner than required by this specification.
- B. Pay subcontractor, service provider, or material supplier for satisfactory performance of the subcontract, service or material supply agreement no later than 10 work days after receipt of payment.
- C. Submit to the Engineer within 5 work days after paying subcontractor(s), service providers, or material supplier(s), a certified payment statement in the form of an affidavit certifying that the total dollar amount paid to each subcontractor, service provider or supplier that the payment has been made promptly, and that the dollar amount paid is the total amount due for work or services performed or materials purchased during the pay period. Contractor is required to submit the affidavit on Contractor's letterhead and include the signature of a responsible official legally representing the Contractor.

## 1.3 PAYMENT TO SUBCONTRACTORS, SUPPLIERS AND SERVICE PROVIDERS - RETAINED MONEY AND ACCRUED INTEREST

- A. Include in subcontract, service or purchase agreement language agreeing to pay retained money and accrued interest upon satisfactory completion of the work of subcontract, service or purchase agreement.
- B. Pay retained money and accrued interest to subcontractor, service or material provider no later than 25 work days after satisfactory completion of the work of subcontract. service or purchase agreement.
- C. Payment of retained money and accrued interest must be paid even if the Contractor has not received payment from the Department.
- D. Submit to the Engineer within 5 work days after paying subcontractor, supplier, or service provider a certified payment statement in the form of an affidavit certifying that the total amount paid is the total amount of retained money and interest due to the subcontractor, service provider or supplier. Provide a signed affidavit by a responsible official legally representing the Contractor, on Contractor's letterhead.
- E. A determination of satisfactory completion and payment of retained money and accrued interest does not relieve the Contractor, subcontractor, service provider nor supplier from any contractual obligation.

#### 1.4 DELAY OF PAYMENT

- A. Delay payment to subcontractor, service provider, or supplier, only for good cause, with prior written notice to subcontractor, service provider or supplier and with prior written approval of the Engineer.
- B. Give subcontractor, service provider or supplier time to correct deficiencies before estimated cut-off date
- C. Not giving notice to subcontractor, service provider, or supplier nor receiving written approval from Engineer will be considered as implied consent to pay promptly.
- D. Engineer withholds from progress payment, delayed payments.
- E. Include in subcontract, service and supply agreements, language providing for the use of appropriate alternative dispute resolution mechanisms to resolve payment disputes.

F. Department holds in escrow disputed funds until the dispute is resolved.

#### 1.5 PENALTIES FOR FAILURE TO MAKE PROMPT PAYMENT

- A. Department will not reimburse for work performed by subcontractors, service providers nor materials delivered by suppliers unless and until the Contractor ensures that subcontractors, service providers and suppliers are promptly paid for work performed or materials delivered.
  - 1. Engineer deducts the dollar amount due but not paid to subcontractor, service provider or supplier from the next progress payment.
  - 2. Engineer may deduct an equal amount from the Contractor's payment.
- B. Department considers the failure to pay promptly an indication of a lack of financial fitness.
  - 1. Forfeit the privilege of bidding on the Department's projects as a prime Contractor until subcontractors, service providers or suppliers are paid.
  - 2. Forfeit the privilege of having a subcontract, supply or purchase agreement approved to perform as a subcontractor, service provider or supplier on the Department's projects until subcontractors, service providers or suppliers are paid.
- C. Department employs other mechanisms, consistent with this part and applicable state and local law, to ensure that DBEs, other Contractors, service providers and suppliers are fully and promptly paid.

#### 1.6 OVERPAYMENT BY ENGINEER

- A. If the Engineer overpays for work or services performed or materials delivered, the Department deducts the dollar amount of the overpayment from future payments to the Contractor.
- B. The subcontractor, service provider or supplier is responsible to keep records and to know the quantity of work or services performed or materials delivered. If overpayment is made to a subcontractor, service provider or material supplier, the subcontractor, service provider or material supplier immediately notifies the Contractor and the Department of the overpayment.
- C. If prompt payment results in overpayment, the subcontractor, service provider or supplier promptly repays the Contractor the amount of the overpayment. If prompt repayment is not made to the Contractor, the prompt payment penalties of this specification applies to subcontractor or supplier.

PART 2 PRODUCTS Not used.

PART 3 EXECUTION Not used.

END OF SECTION

#### SECTION 01557 S

## MAINTENANCE OF TRAFFIC (MOT)

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. MOT Maintainer
- B. Maintenance of Traffic (MOT) plans, Materials, and labor necessary for implementation.
- C. Variable message signs and construction signs

#### 1.2 RELATED SECTIONS

- A. Section 00555: Prosecution and Progress.
- B. Section 01554: Traffic Control.
- C. Section 02842: Delineators.
- D. Section 02891: Traffic Signs.

#### 1.3 REFERENCES

- A. Manual on Uniform Traffic Control Devices, Latest Edition (MUTCD).
- B. UDOT Metric Standard Drawings.
- C. American Traffic Safety Services Association (ATSSA)

#### 1.4 **DEFINITIONS**

A. Maintenance of Traffic (MOT) is defined as the work necessary to advise the public of changes to normal traffic flow, and to indicate planned detours and alternate routes to closed roads. It is intended to be used solely as advisory information to the public.

Maintenance of Traffic 01557 S - 1 of 4

#### 1.5 POST-BID REQUIREMENTS

- A. DEPARTMENT will provide MOT plans to be implemented as part of the bid package.
- B. The apparent low bidder will attend a mandatory meeting as detailed in Section 01554, paragraph 1.4, line A.2.
- C. Attendees of the mandatory meeting will review the CONTRACTOR's submitted traffic control plans and the DEPARTMENT's supplied MOT plans for compatibility. Modify plans where necessary, as set forth in Section 01554, paragraph 1.6: Traffic Control Plan Requirements.
- D. Do not begin work on the project until written approval of the MOT plan is received from the ENGINEER. No item of work can begin until the approved MOT plan is implemented for that phase of work.

#### 1.6 MOT MAINTAINER

- A. The Traffic Control Maintainer, as specified in Section 01554, paragraph 1.7 is responsible for maintenance of MOT on the project. No separate payment will be made for maintenance of MOT.
- B. Inspect MOT devices daily for compliance with the MOT plans. Submit daily inspection reports on a form acceptable to the ENGINEER Record readings from devices using hour meters on the form.

#### 1.7 MAINTENANCE OF MOT DEVICES

A. Maintain traffic control devices per Section 01554, paragraph 1.8: Maintenance of Work Zone Traffic Control.

## 1.8 WAGE RATES FOR TRAFFIC CONTROL PERSONNEL (FEDERAL AID JOBS ONLY)

A. Refer to Section 01554, paragraph 1.9, for wage rate information.

#### 1.9 PAYMENT PROCEDURES

- A. Partial Payments Based on the percentage of the project completed, excluding the cost of MOT.
  - 1. Failure to comply with any of the requirements of this special provision will result in non-compliance.

## B. Price Adjustments:

- 1. The Department reduces payment if the MOT implemented is not in compliance with the approved MOT plan, as determined by the ENGINEER.
- 2. The amount per day by which the CONTRACTOR's compensation will be reduced is calculated using the daily charge in the Schedule of Liquidated Damages in Table 1 of Section 00555 or the Contract lump sum bid price for MOT divided by the number of Contract days, whichever is greater.
- C. Payment for change in scope: Negotiate a price adjustment for MOT if the ENGINEER orders a change in the scope of work which requires modification to the approved MOT Plan.

#### PART 2 PRODUCTS

## 2.1 SIGNS

- A. Refer to Section 02891, Traffic Signs.
- B. Type and configuration as directed by the MOT plans.

## 2.2 VARIABLE MESSAGE SIGNS (VMS)

- A. Advance warning device
  - 1. Conform to guidelines set forth in Section 6F-2 of the MUTCD.
  - 2. Messages can be changed on-site and by dial-up modem

## PART 3 EXECUTION

## 3.1 MODIFICATION OF MOT PLANS

- A. ENGINEER may modify the MOT plans at any time.
- B. Implement changes to the MOT plan before the end of the work shift.
- C. Each phase of construction must be covered by an approved MOT plan. If a construction phase is proposed that is not covered by a DEPARTMENT supplied MOT plan, submit a proposed MOT plan to the ENGINEER for approval.
  - 1. Submit proposed MOT plan to the ENGINEER 10 working days before the proposed MOT plan is to be implemented.
  - 2. Do not begin work until the proposed MOT plan is approved for use, and has been fully implemented.

## 3.2 TRAFFIC CONTROL DEVICES

- A. Installation and Maintenance:
  - 1. Install appropriate devices for each construction phase as identified in the appropriate MOT plan.
  - 2. Maintain devices to provide proper, continuous functionality.
  - 3. Wash devices weekly unless conditions warrant more frequent cleaning.
  - 4. Replace any device missing any part of the message or background.
- B. Channelizing Devices: Use as directed by the MOT plan.
- C. Furnish a daily record of the number and location of all traffic control devices in use.
- D. Remove devices from the site of work when they are not needed for the <u>immediate</u> control of traffic.

## 3.3 VARIABLE MESSAGE SIGN (VMS)

- A. The DEPARTMENT will retain control of messages appearing on the VMS. The CONTRACTOR will not change the location or the message configuration of the VMS unless directed to by the ENGINEER in writing.
- B. Place in view of oncoming traffic without obstructing traffic flow. Relocate VMS to match field conditions at no additional cost to DEPARTMENT.
- C. Provide dial-up modem number to the ENGINEER.
- D. Use necessary traffic control devices with VMS to provide safe operation.
- E. Remove devices from the site of work when they are not needed for the <u>immediate</u> control of traffic.
- F. Unless otherwise specified, display advance notification VMS messages for a minimum of 7 days prior to start of work.

END OF SECTION

#### SECTION 01892 M

# RECONSTRUCT CATCH BASIN, CLEANOUT, METER, VALVE, MANHOLE, AND MONUMENT BOXES

This Special Provision is intended to limit traffic disruption while providing a quality product.

*Modify Section 2.1 A. by adding the following:* 

#### 2.1 A.

- 1. Minimum 1500 PSI within 12 hours and 2000 PSI within 24 hours
- 2. Maximum water cement ratio .4
- 3. Minimum 700 lb. /cubic yard of cement
- 4. Add accelerators (excluding calcium chloride) or plasticizers as necessary to achieve quick set and strength.
- 5. Add a minimum of 20 lb./cubic yard of steel fiber to increase strength of mix. Poly-fibers may also be included in addition to steel if part of a standard fiber additive package.
- 6. Steel fiber to be cold drawn with deformed ends 1 inch 2 inch in length. Minimum steel tensile strength of 120,000 PSI (ASTM A820).

*Modify section 3.1 by adding the following:* 

#### 3.1 C.

- 1. Correctly reference all boxes before paving.
- 2. Contact Utility owner before any work commences.
- 3. Lower boxes before rotomilling and reconstruct top section after paving.
- 4. Reconstruct top section of cleanout box and catch basin using #5 coated rebar tied to existing reinforcing steel with a minimum 6 inch overlap. The existing steel in the structure must be exposed to allow for the required overlap.
- 5. Begin adjustment work on only the number of boxes that can be completed in a 24 hour period. (including concrete set to 2000 PSI when raising boxes)
- 6. Use shims approved by the Engineer to adjust frame slope when necessary. Do not use wood, rocks or bricks.
- 7. Consolidate concrete using a high frequency internal vibrator.
- 8. Remove any debris that enters the manhole or catch basin.
- 9. Cooperate with utility company to provide access to boxes and manholes during construction if necessary.

reached or at the direction of the engineer.

Remove traffic control devices as soon as possible after 2000 PSI has been

10.

## **SECTION 02083S**

## RELOCATE FIRE HYDRANT

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

A. Materials and procedures for relocating fire hydrant

## 1.2 RELATED SECTIONS

A. Section 02061: Select Aggregate

## 1.3 SYSTEM DESCRIPTION

A. Provide a fully functional relocated fire hydrant.

#### PART 2 PRODUCTS

#### 2.1 MATERIALS

- A. Furnish all materials necessary to complete the relocation including 6" pipe, fitting, and thrust blocks.
- B. All mechanical joints will use megalug followers.
- C. Pipe and fittings shall be of the same size and type as existing pipe and fittings.

## PART 3 EXECUTION

#### 3.1 PREPARATION

- A. Obtain all necessary permits associated with the relocation
- B. Coordinate the relocation with the water system authority as well all water main shutdowns necessary to complete the work. Contact Scott Hodge at Clearfield City, 801-525-2788.
- C. Before trenching
  - 1. Stake location for the fire hydrant
  - 2. Have utility companies locate and mark their lines.

## 3.2 **RE-INSTALLATION**

- A. Water system authority products and installation specifications supersede those listed below. Coordinate with Scott Hodge of Clearfield City.
- B. Excavate a trench from the existing fire hydrant to the new location.
- C. Remove existing fire hydrant and use for relocation.
- D. Install necessary 6" pipe, fittings and thrust blocks.
- E. Bed all pipe with free draining granular backfill borrow surrounding the pipe.
- F. Align the fire hydrant with the roadway to match the existing condition.
- G. Check for leaks.
- H. Chlorinate and pressure test fire hydrant.

## 3.3 ACCEPTANCE

A. The Engineer and the water system authority will do the acceptance of the relocation fire hydrant.

END OF SECTION

#### SECTION 02221 M

# REMOVE STRUCTURE AND OBSTRUCTION

## PART 3 EXECUTION

Add the following to Section 02221, Part 3:

## 3.18 REMOVE LIGHT POLE

- A. Remove and properly dispose of light pole where designated. Located at Sta. 9+39.77, 33.8 Rt. in parking lot.
- B. Disconnect power and remove electrical lines from power source. Properly cover and protect exposed ends of electrical lines. Coordinate with property owner.

## 3.19 REMOVE AND SALVAGE MONUMENT

- A. Remove and properly dispose of concrete.
- B. Remove and Salvage Brass Monument. Deliver to ENGINEER.

## 3.20 REMOVE UTILITY BOX

A. Remove and properly dispose of utility box.

# 3.21 REMOVE BUS BENCH

A. Remove and properly dispose of bus bench.

Remove Structure and Obstruction 02221M - 1 of 1

## **SECTION 02225S**

# ASPHALT SURFACING REMOVAL (STRUCTURES)

## PART 1 GENERAL

## 1.1 SECTION INCLUDES

A. Remove existing asphalt surfacing materials from the east approach slab.

## PART 2 PRODUCTS

## 2.1 REMOVAL EQUIPMENT

A. Use removal equipment capable of removing a uniform thickness of asphalt on the approach slab without damaging the underlying concrete surfaces.

## PART 3 EXECUTION

## 3.1 PREPARATION

- A. Remove a uniform thickness of asphalt from the approach slab without damaging concrete surfaces.
  - 1. Field verify the asphalt surfacing removal depth.
  - 2. Use equipment that weighs less than 22 tons.

END OF SECTION

#### **SECTION 02316 M**

## ROADWAY EXCAVATION

Add the following to paragraph 1.2 RELATED SECTIONS:

I. Section 00725: Scope of Work

J. Section 01721: Survey

Add the following to paragraph 1.6 ACCEPTANCE:

- B. Payment is plan quantity by the cubic meter. No adjustment will be made to plan quantities unless staked quantities differ from plan quantities by more than percent +/-.
- C. Notify the Engineer in writing before beginning excavation in any area or balances of excavation if the Contractor determines that the staked quantities differ from the plan quantities by more than 5 percent +/-. The following procedures then apply:
  - 1. Provide calculations and plots in accordance with Section 01721, paragraph 3.3 Computations and Plots.
  - 2. Evaluation of the "plan quantities" to "staked quantities" will be by individual cuts or balances as determined by the Engineer to provide the necessary accuracy.
  - 3. Do not begin excavation of any cut sections that the Contractor determines to differ from plan quantities by more than 5 percent +/- until the calculations and plots have been submitted, reviewed, and approved quantities are determined with the Engineer. No payments, partial or final will be made until submissions are provided and approved.
- D. When the ENGINEER determines the staked quantities differ from plan quantities by more than 5 percent +/-, the approved quantities will become the plan quantities (adjusted).

Roadway Excavation 02316M - 1 of 2

- E. When the Engineer directs changes in the alignment, grade, or scope of work that result in a change in the roadway excavation quantities, the revised quantities become the plan quantities (adjusted).
- F. Payment will be made at the original unit bid price for the plan quantities (adjusted).
- G. If plan quantities are adjusted from the original contract bid plan quantities, Section 00725 paragraph 1.5 Significant Changes in the Character of Work, will apply.

## **SECTION 02319 S**

# POTHOLING FOR UTILITIES

## PART I GENERAL

## 1.1 SECTION INCLUDES

A. Potholing will be used to verify location and elevation of existing utilities.

## PART 2 PRODUCTS

#### 2.1 MATERIALS

A. Not Used.

## PART 3 EXECUTION

#### 3.1 CONSTRUCTION

- A. Pothole after Blue Stakes has marked existing lines. Pothole locations of possible conflicts as shown on the plans, not previously identified on the plans, and as directed by the ENGINEER.
- B. Cooperate with the utility companies to protect their facilities.
- C. Hand dig to expose lines as per Section 00727, Cooperation with Utilities.
- D. Backfill resultant holes with imported materials and compact as per Section 02324.
- E. Backfill the final depth to match the composition, density and elevation of the existing surface.
- F. Utility lines to pothole include gas lines and phone lines.

**END OF SECTION** 

Potholing For Utilities 02319 S - 1 of 1

## **SPECIAL PROVISION**

## STP-0126(6)6

## **SECTION 02610M**

# PIPE CULVERTS

Add the following to paragraph 1.2, Related Sections:

## 1.2 RELATED SECTIONS

F. Section 03211: Reinforcing Steel and Welded Wire.

Add the following to paragraph 1.3, References:

## 1.3 REFERENCES

- U. ASTM C-109: Compressive Strength of Grout.
- V. ASTM C-827 and ASTM C-157: Non-shrink Percentage of Grout.

Add the following to Part 1:

#### 1.4 ACCEPTANCE CRITERIA

- A. At a minimum, UDOT evaluates the following criteria for the acceptance of pipe culverts on the project. The Engineer selects and evaluates any or all culverts from the following criteria and approves any proposed correction procedures.
  - 1. Line and grade:
    - a. Culverts not to exceed the line and grade tolerances shown in Table A.
    - b. Measure deviations from the final staked locations surveyed in the construction process.
    - c. Correct defects in line and grade along the entire length of the culvert
    - d. Engineer approves accepted deviations from line and grade greater than those allowed in Table A.
  - 2. Barrel distortion:

Pipe Culvert 02610M - 1 of 3

- a. Culvert barrels not to exceed the tolerances shown in Table A.
- b. Distortion of the pipe is measured along a straight line through the centerline of a pipe.
- 3. Pipe culvert damage: Irregular or distorted in shape, has cracks, dents, holes, splits, or loose nuts or bolts.
- 4. Joints: Not to be poor fitting, contain uneven laps, or show signs of leaking.
  - a. Furnish a Certificate of Compliance from the manufacturer of the type specified.
  - b. Install according to suppliers recommended procedures.
- 5. Coatings: Furnish a Certificate of Compliance from the manufacturer for the pipe Class specified. The Department takes a representative sample from each lot furnished to conduct verification testing.

Table - A TOLERANCES					
Alignment Tolerances			Gradual Ovaling or Elliptical Distortions		
Design Grade	Max. Line Deviation	Max. Grade Deviation		Nominal Pipe Diameter *	Maximum Distortions **
	inch/100 ft	inch/100 ft		inch	inch
≥3 %	<u>1</u>	<u>1/4 +/-</u>		<u>18</u> 24	+/- 0 - 7/8 +/- 1 - 1/4
>2 %	<u>3/4</u>	<u>1/5 +/-</u>		$     \begin{array}{r}       \hline       24 \\       \hline       30 \\       \hline       36 \\       \hline       42     \end{array} $	+/- 1 - 1/2 +/- 1 - 7/8
≤ 2 %	<u>1/2</u>	1/8 +/-		42 +/-	+/- 2 +/- 2 - 3/8
Notes-	For nominal culvert diameters larger than 48 inch, use measured diameter to				

For nominal culvert diameters larger than 48 inch, use measured diameter to calculate 5 percent allowable distortion.\*

<u>Maximum distortions are used to define dimensions associated with allowable pipe deflections.</u> Measure directly or by use of a mandrel test\*\*

Add the following to paragraph 2.1, Pipe Culvert Classes:

## 2.1 PIPE CULVERT CLASSES

D. Use Class V strength pipe.

Add the following to paragraph 2.2, Pipe Culvert Types:

## 2.2 PIPE CULVERT TYPES

B. Circular Pipe Culvert may be replaced with Pipe Arch Culvert as necessary to achieve absolute minimum cover of 12" due to utility conflicts, with no additional cost to the department. Pipe Culvert must be hydraulically equivalent.

Add the following to Part 2:

## 2.5 MATERIALS

- A. Non-shrink Grout:
  - 1. Premixed, nonmetallic, noncorrosive, nonstaining product containing selected silica sands, Portland Cement, shrinkage compensating agents, plasticizing and water reducing agents.
  - 2. Capable of developing compressive strength of 6500 to 9000 psi in 28 days.

Add the following to Section 02610, Part 3:

#### 3.10 CONNECT TO EXISTING BOX

- A. Extend existing pipe as necessary to reach new box. Maintain constant slope to provide proper drainage.
- B. Install as per standard drawings DG-1 through DG-9.
- C. Core drill existing box as necessary allowing room for installation of new storm drain pipe.
- D. Center the connecting pipe within the hole in the box wall and adequately brace to carry the full weight of the pipe at elevation specified from plans prior to grouting of the void area..
- E. Completely fill the void in the box wall with grout, between the pipe and the outside of the hole to form a water tight joint uniformly finished inside and out.

## **SPECIAL PROVISION**

## STP-0126(6)6

## **SECTION 02742S**

# PROJECT SPECIFIC SURFACING REQUIREMENTS

## PART 1 GENERAL

## 1.1 SECTION INCLUDES

- A. Required PG Asphalt or emulsion.
- B. Number of gyrations to use for Superpave Mix Design.

## PART 2 PRODUCTS

## 2.1 MIXES

- A. Hot Mix Asphalt (HMA): ( Refer to bid item for size)
  - 1. PG 64-34 Asphalt.
  - 2.  $N_{initial} = 8$   $N_{design} = 100$   $N_{final} = 160$
- B. Tack Oil:
  - 1. SS-1H Diluted 1:1.
- C. Micro-Surfacing
  - 1. For asphalt and additives see Special Provision 02788S, Micro-Surfacing.

## PART 3 EXECUTION Not used.

END OF SECTION

Project Specific Surfacing Requirements 02742S – Page 1 of 1

#### **SECTION 02765 S**

## PAVEMENT MARKING PAINT

Delete Section 02765 and replace with the following:

#### PART 1 GENERAL

## 1.1 SECTION INCLUDES

- A. Furnish Acrylic Water Based pavement marking paint meeting Federal Specification TTP-1952 D. And refer to 2.1 for resin requirement.
- B. Apply to asphaltic or concrete pavement as edge lines, center lines, broken lines, guide lines, symbols and other related markings.
- C. Remove pavement markings.

## 1.2 REFERENCES

- A. AASHTO M 247: Glass Beads Used in Traffic Paint.
- B. ASTM D 562: Consistency of Paints Measuring Krebs Unit (KU) Viscosity Using the Stormer-Type Viscometer.
- C. ASTM D 711: No-Pick-Up Time of Traffic Paint.
- D. ASTM D 2205: Selection of Tests for Traffic Paints
- E. ASTM D 2743: Uniformity of Traffic Paint Vehicle Solids by Spectroscopy and Gas Chromatography.
- F. ASTM D 3723: Pigment Content of Water-Emulsion Paints
- G. ASTM D 3960: Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings.

Pavement Marking Paint 02765 - 1 of 4

- H. ASTM D 4451: Pigment Content of Paints
- I. ASTM D 5381: X-Ray Fluorescence (XRF) Spectroscopy of Pigments and Extenders.
- J. Federal Standards 595B, 37875, 33538, 11105 and TTP-1952 D.

#### 1.3 ACCEPTANCE

## A. UDOT ENGINEER:

- 1. Randomly samples pavement marking paint and submits to Central Chemistry Lab for acceptance.
- 2. Randomly generates the location of each test and removes all loose or excess beads from the line prior to testing.
- 3. Visually inspects each line to verify bead adhesion and compliance with specified line dimensions requirements.
- 4. Verifies that the paint and beads are being applied within specified tolerances a minimum of once each production day.
- 5. Verify quantities used by measuring both paint and bead tanks prior to and after application.
- B. Repaint any line or symbol failing to meet bead adherence and dimensional requirements.
- C. Repaint any line or symbol failing to meet the minimum application requirements for paint or beads.

## PART 2 PRODUCTS

#### 2.1 PAINT

A. Choose an approved pavement marking paint from the UDOT Research Division "Accepted Products Listing." Follow Federal Standards 595B, 37875, 33538, and 11105. Meet the following requirements for Acrylic Water Based Paint:

CIELAB (L*a*b*) D65/10°					
White	Yellow	Red			
L* 91.9 to 95.6	L* 70.0 to 72.7	L* 31.4 to 33.4			
a* -1.8 to -2.1	a* 22.5 to 24.8	a* 51.6 to 52.6			
b* 3.8 to 2.2	b* 89.7 to 73.9	b* 34.1 to 35.1			

- 1. No-track time: Not more than 5 minutes when tested according to ASTM D 711.
- 2. Volatile Organic Compounds Content: Less than 1.25 lbs/gal ASTM D 3960.
- 3. Free of lead, chromium, or other related heavy metals ASTM D 5381.
- 4. Pigment: Percent by weight: Acrylic Water Based minimum of  $62.0 \pm 2.0$  ASTM D 3723.
- 5. Total Solids: Percent by weight: Acrylic Water Based minimum of 77.0 ASTM D 2205.
- 6. Acrylic water based paint must contain a minimum of 40 percent, by weight, 100 percent acrylic cross-linkable emulsion as determined by infrared analysis and other chemical analysis available to UDOT. ASTM D 2205
- 7. ASTM D 562, ASTM D 2743, ASTM D 4451 and ASTM D 5381: Tests used to verify paint samples meet "Accepted Products Listing".

## 2.2 GLASS SPHERE (BEADS) USED IN PAVEMENT MARKING PAINT

- A. Specific Properties:
  - 1. Meet AASHTO M 247.
  - 2. Meet type II, uniform gradation.

#### PART 3 EXECUTION

## 3.1 PREPARATION

- A. Line Control.
  - 1. Establish control points at 100 ft intervals on tangent and at 50 ft intervals on curves.
  - 2. Maintain the line within 2 inches of the established control points and mark the roadway between control points as needed.
    - a. Remove paint that is not placed within tolerance of the established control points and replace at no expense to the Department. Refer to article 3.4
- B. Remove dirt, loose aggregate and other foreign material and follow manufacturer's recommendations for surface preparation.

## 3.2 APPLICATION

A. Pavement Marking Paint: Apply at the following rates:

Pavement Marking Paint 02765 - 3 of 4

- 1. 4 inch Solid Line: From 270 to 350 ft/gal
- 2. 4 inch Broken Line: From 1080 to 1400 ft/gal
- 3. 8 inch Solid Line: From 135 to 175 ft/gal
- B. Replace pavement markings that are less than 14 wet mils in thickness.
- C. No payment for pavement markings placed in excess of 18 wet mils in thickness.
- D. Painted Legends and Symbols 1 gallon per 100 square feet.
- E. Glass Sphere (Beads): Apply a minimum of 8 lbs/gal of paint, the full length and width of line and pavement markings.
- F. Begin striping operations no later than 24 hours after ordered by the Engineer.
- G. At time of application apply lines and pavement markings only when the air and pavement temperature are:
  - 1. 50 degrees F and rising for Acrylic Water Based Paint.
- H. Comply with Traffic Control Drawing TC16

## 3.3 CONTRACTOR QUALITY CONTROL

A. Application Rate: Verify that the paint and beads are being applied within specified tolerances prior to striping.

## 3.4 REMOVE PAVEMENT MARKINGS

- A. Use one of these removal methods:
  - 1. High pressure water spray
  - 2. Sand blasting
  - 3. Shot blasting.
- B. Use equipment specifically designed for removal of pavement marking material.

END OF SECTION

Pavement Marking Paint 02765 - 4 of 4

#### SECTION 02771 M

# CURBS, GUTTERS, DRIVEWAYS, PEDESTRIAN ACCESS RAMPS, AND PLOWABLE END SECTIONS

#### PART 1 GENERAL

Delete Line A of Paragraph 1.1, Section Includes, and replace with the following:

## A. SECTION INCLUDES

A. Materials and procedures for constructing curbs, gutter transitions, driveways, pedestrian access ramps, plowable end sections and waterways.

Delete Line E of Paragraph 3.3, Finishing Concrete, and replace with the following:

- E. Stamp detectable warning into pedestrian ramps as shown.
  - 1. Follow manufacturers recommended installation practice.
  - 2. Trowel black color hardener into concrete surface to provide contrast between detectable warning and adjacent concrete flatwork.
  - 3. Place form release agent (same color as hardener or clear) onto concrete surface.
  - 4. Stamp concrete surface with pattern that meets ADA truncated domes arranged in square grid pattern parallel to the direction of the crosswalk. Truncated domes that are arranged in a diamond pattern are unacceptable.
  - 5. See Detail Sheet DT-1.

## **SECTION 02772 S**

# SURFACE COURSES - POTHOLE PATCHING

PART 1 GENERAL	PA	RT 1	GENERAL	Ĺ
----------------	----	------	---------	---

## 1.1 SECTION INCLUDES

A. Item to patch potholes.

## 1.2 RELATED SECTIONS

- A. Section 02316: Roadway Excavation
- B. Section 02324: Compaction
- C. Section 02705: Pavement Sawing
- D. Section 02721: Untreated Base Course (UTBC)
- E. Section 02741: Hot Mix Asphalt (HMA)
- F. Section 02748: Prime Coat/Tack Coat.
- G. Section 02961: Rotomilling

## PART 2 EXECUTION

## 2.1 GENERAL REQUIREMENTS

A. Excavate and patch areas with unstable pavement or where rotomilling created weak or insufficient pavement thickness.

- B. Large areas may be excavated with rotomill. Small areas with backhoe or hand tools. Edges must be sawed or cut square.
- C. The Contractor will be required to excavate and place 6"depth of Untreated Base Course 3/4" or 1" max and 4" depth of HMA Mix 1/2" along with tack and compaction.
- D. Specific material requirements determined by the Engineer.

## **SECTION 02776 M**

# CONCRETE SIDEWALK, MEDIAN FILLER, AND FLATWORK

## PART 3 EXECUTION

Add the following to paragraph 3.2, Placing and Finishing Concrete:

F. Place "brick red" colored, "new brick herringbone" pattern in Textured Concrete Flatwork, or stamp as approved by ENGINEER and Clearfield City, Scott Hodge, (801)525-2788.

## SECTION 02788 S

## MICRO-SURFACING

#### PART 1 GENERAL

## 1.1 SECTION INCLUDES

A. Furnish aggregate, polymer-modified asphalt emulsion, mineral filler, additives, and water. Proportion the mix and spread on the pavement surface. The microsurface mixture will be capable of being spread in variable thickness cross-sections (ruts, scratch courses, and surfaces).

## 1.2 RELATED SECTIONS

A. Section 02745: Asphalt Material

## 1.3 REFERENCES

- A AASHTO T 11: Materials Finer Than 75 μm (No. 200) Sieve in Mineral Aggregates by Washing
- B. AASHTO T 19: Unit Weights and Voids in Aggregate
- C. AASHTO T 27: Sieve Analysis of Fine and Coarse Aggregates
- D. AASHTO T 49: Penetration of Bituminous Materials
- E. AASHTO T 53: Softening Point of Bitumen
- F. AASHTO T 89: Determining the Liquid Limit of Soils
- G. AASHTO T 90: Determining the Plastic Limit and Plasticity Index of Soils

Micro-Surfacing 02788S - 1 of 11

- H. AASHTO T 96: Resistance to Abrasion of Small Size Coarse Aggregate by Use of the Los Angeles Machine
- I. AASHTO T 104: Soundness of Aggregate by Use of Sodium Sulfate or Magnesium Sulfate
- J. AASHTO T 112: Clay Lumps and Friable Particles in Aggregate
- K. AASHTO T 176: Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test
- L. AASHTO T 308: Determining the Asphalt Binder Content of Hot-Mix Asphalt (HMA) by the Ignition Method
- M. AASHTO M 85: Portland Cement
- N. AASHTO M 208: Cationic Emulsified Asphalt
- O. ASTM D 2170: Standard Test Method for Kinematic Viscosity of Asphalts (Bitumens)
- P. ASTM D 3319: Standard Practice for Accelerated Polishing of Aggregates Using The British Wheel
- Q. ASTM D 3665: Standard Practice for Random Sampling of Construction Materials
- R. ASTM D 3666: Specification for Minimum Requirements for Agencies Testing and Inspecting Bituminous Paving Materials
- S. ASTM D 4561: Practice for Quality Control Systems for Organizations Producing and Applying Bituminous Paving Materials
- T. ASTM 5506: Practice for Organizations Engaged in the Certification of Personnel Testing and Inspecting Bituminous Paving Materials
- U. ASTM D 5821: Determining the Percentage of Fractured Particles in Coarse Aggregate
- V. ASTM E 178: Practice for Dealing with Outlying Observations

- W. UDOT Materials Manual of Instruction Part 8-209: Asphalt Binder Management Plan
- X. UDOT Materials Manual of Instruction Part 8-984: Sampling Methods

## PART 2 PRODUCTS

## 2.1 ASPHALT MATERIAL

- A. Polymer-Modified Asphalt Emulsion: The emulsified asphalt will be a quick-set polymer modified CSS-1H emulsion conforming to AASHTO M208. The polymer material will be milled or blended into the asphalt cement or blended into the emulsifier solution before the emulsification process.
- B. A sample of the asphalt / polymer emulsion will be submitted along with the job-mix design for approval.
- C. The modified emulsion residue will meet the following criteria:
  - 1. Residue after distillation when tested in accordance with AASHTO T59 (modified) will be at least 62% solids. (Modified distillation procedure: Emulsion residue shall be heated to  $350^{\circ}$  F  $\pm$   $10^{\circ}$  F and held for 20 minutes. The distillation shall be performed within  $60 \pm 5$  minutes.)
  - 2. Softening point when tested in accordance with AASHTO T53 will be at least 135°F (57°C).
  - 3. Penetration at 77°F (25°C) when tested in accordance with AASHTO T49 will be between 50 and 80.
  - 4. Kinematic viscosity at 275°F (135°C) when tested in accordance with ASTM 2170 will be at least 650 CST.
  - 5, Must parallel the standard from an established infra red spectrum characterizing the asphalt/ polymer emulsion.

## 2.2 MINERAL AGGREGATE

- A. Mineral Aggregate: The following requirements will be used to determine the suitability of the aggregate sources and will not be used for routine project control.
  - 1. Soundness using sodium sulfate in accordance with AASHTO T104 will not exceed 15% loss.
  - 2. Abrasion loss when tested in accordance with AASHTO T96 will not exceed 30%.
  - 3. Sand equivalent values when tested in accordance with AASHTO T176 will be at least 60.

- 4. Polishing values when tested in accordance with ASTM D3319 will be at least 31. Predominantly limestone or dolomite aggregates will not be accepted.
- B. Manufactured Aggregate
  - 1. Will be hard and durable.
  - 2. Manufactured from 100% crushed stone.
  - 3. Free of organic material, clay balls or other deleterious substances.
- C. Manufacture the dry mineral aggregate to meet one of the gradations shown below when tested in accordance with AASHTO T27 and AASHTO T11. The type to be used will be designated in the proposal. Refer to Table 2 for gradation design limits.
- D. The mineral aggregate shall be passed over a scalping screen prior to transfer to the microsurfacing mixing machine to remove oversize material.

Table 2
Job-Mix Gradation Design Limits Type III

Sieve Size	Broad Band Gradation Percent Passing	Stockpile Tolerances
3/8 inch	100	0
No. 4	70-90	±5
No. 8	45-70	±5
No. 16	28-50	±5
No. 30	19-34	±5
No. 50	12-27	<u>±</u> 4
No. 100	7-18	±3
No. 200	5-15	±2

- E. Mineral Filler: Type I&II Portland Cement AASHTO M85 or Hydrated Lime.
- F. Water: Use potable water or water free from impurities or chemical constituents that will adversely effect the emulsion or paving mix reactions as determined by the laboratory job-mix design.

G. Additives: Additives may be added to the emulsion mix or any of the component materials to provide the control of the quick-set properties and increase adhesion. They must be included as part of the laboratory job-mix design.

## 2.3 **JOB-MIX DESIGN**

- A. Job-Mix Design: Submit in writing to the engineer for review at least ten days before the mixing and placing of any micro-surfacing.
- B. The job-mix will be prepared by an approved independent testing laboratory with experience in micro-surfacing mix design.
- C. The laboratory job-mix design will show each ingredient amount designed within the following limits:
  - 1. Residual asphalt cement content  $7.5 \pm 2\%$  by dry weight of aggregate.
  - 2. Aggregate gradation within the job-mix gradation design limits for the type specified as shown in Table 409-1.
  - 3. Mineral filler  $1.5 \pm 1.5\%$  by dry weight of aggregate.
  - 4. Polymer modifier 2.5% minimum polymer solids based on the residual asphalt content.
  - 5. Additives specified by percent within limits as determined by design testing to control mix set times and adhesion.
- D. All component materials indicated in the job-mix design will be representative of the materials to be used on the project.
- E. Ingredients proportions will be controlled by metering or measuring devices on the micro-surfacing equipment. Readings from the metering or measuring devices will be used to determine compliance with limits stated in the approved job-mix design.
- F. Job-Mix Gradation, as part of the job-mix design, will be submitted to the engineer for review ten working days prior to producing and placing micro-surfacing.
- G. Single value percentages for the percent passing each sieve size will not vary by more than the stockpile limits and will remain within the Job-Mix Design Gradation Limits as shown in Table 2.
- H. To make changes in the job-mix gradation:

- 1. Submit a written request for a change in the job-mix gradation.
- 2. Submit a new job-mix design if any changes in gradation are outside the gradation band allowed by the stockpile tolerance in Table 2.

## PART 3 EXECUTION

## 3.1 STOCKPILES

- A. Stockpiles sufficient for two day's production will be in place and accepted by the engineer before micro-surfacing operations begin.
- B. Stockpile locations within the state Right-of-Way must be approved by the engineer.
- C. Avoid segregation or degradation when placing the aggregate in stockpiles or when moving it for use. Any segregated or degraded material will be reprocessed or removed from the project.

## 3.2 EQUIPMENT

- A. The equipment needed include mixing equipment, proportioning devices, spreading equipment, and auxiliary equipment.
- B. Mixing equipment includes a machine that is specifically designed and manufactured to mix and lay micro-surfacing. The material will be mixed by an automatically sequenced, self-propelled micro-surfacing mixing machine, which will be a continuous flow mixing unit, able to accurately deliver and proportion the aggregate, emulsified asphalt, mineral filler, control setting additive, and water to a revolving multi-blade double shafted mixer and discharge the mixed product on a continuous flow basis. The machine will have sufficient storage capacity for aggregate, emulsified asphalt, mineral filler, control additive, and water to maintain an adequate supply to the proportioning controls. The machine will be capable of self-loading materials while continuing to lay microsurfacing. The machine will be equipped to allow the operator to have full control of the forward and reverse speed during applications of the micro-surfacing material. The self-loading device, opposite side driver stations, and forward and reverse speed controls will be original equipment manufacturer design.

Proportioning devices shall have individual volume or weight controls for proportioning each material to be added to the mix (i.e. aggregate, mineral filler, emulsified asphalt, additive, and water) will be provided and properly marked.

- C. The spreading equipment will spread the mixture uniformly by means of a conventional augured surfacing spreader box attached to the mixer and equipped with paddles to agitate and spread the material evenly throughout the spreader box. A front seal will be provided to insure no loss of the mixture at the road contact point. The rear seal will be adjustable and act as final strike-off. The spreader box and rear strike-off will be designed and operated to produce a free flow of uniformly consistent materials to the rear strike-off. The spreader box will have suitable means provided to side shift the box to compensate for variations in the pavement geometry. The rut filling **spreader** box will be specifically designed to fill ruts **with an average depth greater than 1/2"**.
- D. Auxiliary equipment refers to surface preparation equipment, traffic control equipment, hand tools, and any other support equipment necessary to accomplish the work. These will be provided by the contractor.
- E. Each mixing unit to be used in performance of the work will be calibrated in the presence of the engineer prior to construction. Previous calibration documentation covering the exact materials to be used may be acceptable, provided they were made during the calendar year. The documentation will include an individual calibration for each material at various settings, which can be related to the machines metering devices. No machine will be allowed to work on the project until the calibration has been completed and accepted.
- F. Provide acceptable methods of traffic control to protect the micro-surfacing from all types of vehicular traffic damage. Opening to traffic does not constitute acceptance of the work.

## 3.3 Surface Preparation

- A To prepare the surface, clear the surface of all loose material, silt spots, vegetation, and other objectionable matter immediately before applying micro-surfacing. Any standard cleaning method can be used provided the results are acceptable. If water is used, cracks will be allowed to dry thoroughly before micro-surfacing. Manholes, valve boxes, drop inlets and other service entrances will be protected from the micro-surfacing. Surface preparation will be subject to approval by the engineer before surfacing.
- B. The contractor is responsible to follow these guidelines when applying the microsurfacing.

C. Pre-wetting of the surface is allowed when required by local conditions. Pre-wet the surface with water by fogging ahead of the spreader box. Adjust the rate of application of the water fog spray during the day to suit temperatures, surface texture, humidity, and dryness of the pavement.

## 3.4 TEST STRIP

A. A test strip of at least **250 feet** length will be applied to the roadway before initial placement commences. The test strip must achieve initial set within 30 minutes and show no visual signs of distress when exposed to traffic action after curing for 2 hours. If the above conditions are present and all other requirements are met, the test strip will become part of the completed item. If the test strip fails to meet the conditions stated above, the contractor will remove and replace the micro-surfacing at no expense to the department. The contractor then must gain reapproval of the micro-surfacing by the engineer and repeat the test strip process. The engineer may require a new job-mix design if failures indicate an ingredient problem.

#### 3.5 PLACEMENT

- A. The micro-surfacing will be uniform in consistency upon leaving the mixer. No lumping, balling, or unmixed aggregate will be permitted to remain in place. A sufficient amount of material will be carried in all parts of the spreader at all times so that a complete coverage is obtained. Overloading of the spreader will be avoided.
- B. The thickness of the micro-surfacing application will not exceed twice the thickness of the largest aggregate size for the type being used. Exception to this would apply when a full cover course is planned over one or two lift applications as in the case of deeper rut areas. The micro-surfacing will be placed in two lifts unless otherwise specified.
- C. Application rates will be as designated in the proposal. Average single lift application rates will be within limits as follows:
  - Type III primary and interstate, 20 to 30 lbs. per square yard with an average application of not less than 24 lbs. per square yard unless otherwise stated in the project plans.
  - Type III to fill wheel ruts, as required by rut depth and required crown.
- D. No excess buildup, uncovered areas, or unsightly appearance will be allowed on longitudinal or transverse joints. The final surface coat will be placed by beginning on the low side of the cross-slope and progressing to the higher side. The contractor will provide suitable width spreading equipment to produce a minimum number of

longitudinal joints throughout the project. When possible, longitudinal joints will be placed on lane lines. Half passes and odd width passes will be used only in minimum amounts. If half passes are used, they will not be the last pass of any paved area. A maximum of 6 inch will be allowed for overlap of longitudinal lane line joints.

- E. The micro-surfacing will possess sufficient stability so that premature breaking of the material in the spreader box does not occur. The mixture will be homogeneous during and following mixing and spreading. It will be free of excess water or emulsion and free of segregation of the emulsion and aggregate fines from the coarser aggregate.
- F. Areas which cannot be reached with the mixing machine will be surfaced using hand squeegees to provide complete and uniform coverage. If necessary, the area to be hand worked will be lightly dampened with water prior to mix placement. Care will be taken to leave no unsightly or nonuniform appearance from hand work. The same type of finish as applied by the spreader box will be required. Hand work will be completed during the machine application process.
- G. Apply micro-surfacing in straight lines along curbs and shoulders. No runoff on these areas will be permitted. Lines at intersections will be kept straight to provide a good appearance. Use **roofing felt** if necessary to mask off the end of streets to provide straight lines.
- H. Avoid application of micro-surfacing or remove thoroughly from manholes and gutter. Remove any debris associated with the performance of the work on a daily basis.
- I. The micro-surfacing will not be applied if either the pavement or air temperature is below 50°F (10°C) and falling, but may be applied when both pavement and air temperature are above 45°F (7°C) and rising. No micro-surfacing will be applied when there is danger that the finished product will freeze before 24 hours. The mixture will not be applied when weather conditions prolong material set time and delay opening to traffic beyond two hours.

## 3.6 Testing and Acceptance

A. The following steps will be taken when sampling and testing the micro-surfacing.

- B. Each load of polymer modified asphalt emulsion delivered to the job-site or staging area will be accompanied with a certificate of analysis / compliance to identify it as the same emulsion composition that was used in the job-mix design.
- C. Samples will be taken in accordance with AASHTO T40 from each load of polymer modified emulsion and tested according to the letter of minimum requirements for the project.
- D. Samples of the asphalt / polymer emulsion will be taken before placement begins and, when tested, must parallel the standard from an established spectrum characterizing the emulsion. The emulsion submitted with the job-mix design will serve as the standard to assure that the same emulsion is used throughout the project. Should large enough disparities occur the engineer can request a new job-mix design and reapproval of the micro-surfacing.
- E. Acceptance of the job-site or staging area stockpiles will be based on the average of three gradation tests conducted in accordance with AASHTO T27 and AASHTO T11. If the average of the three tests is outside the band established by the job-mix gradation design limits and the stockpile tolerance, the contractor will remove the material from the stockpile area or blend additional material to bring it into specification compliance. Additional aggregate materials used for blending must meet aggregate tests stated above. Any blending operation must produce a thoroughly mixed stockpile with a consistent gradation. A new job-mix gradation needs to be submitted for acceptance if after blending, the stockpile does not meet the original job-mix gradation. Reworked or blended stockpiles will be retested for gradation acceptance.
- F. Any increase or decrease in the amount of mineral filler added to the mix during production will be limited to 1% or less as long as any changes are still within the limits of the job-mix design.
- G. The engineer may sample any material that exhibits a non-uniform appearance.
- H Initial set of the micro-surfacing must take place within 30 minutes and after 2 hours curing time the surface will withstand traffic action without showing any signs of distress.

- Micro-surfacing operations will cease if these conditions are not met and the effected micro-surfacing will be removed and replaced at no expense to the department.
- I. Flushed or excessively rich areas appearing in the micro-surfacing after two hours from the time of placement will be removed and replaced by the contractor.
- J. Any areas in the finished micro-surfacing that exhibit any measurable rutting, shoving or other evidence of premature deformation when exposed to traffic action will be removed and replaced with reapproved micro-surfacing materials and procedures.

**END OF SECTION** 

## SECTION 02892 M

# TRAFFIC SIGNAL

Add the following to paragraph 1.2, Related Sections:

I. Section 13554: Polymer Concrete Junction Box

Add the following to Part 2, Products:

## 2.16 SIGNAL CONTROLLER

- A. Signal controller shall be an Econolite TS2 Type 1 Controller and Cabinet to work with fiber optic software for future interconnect.
- B. Include a fiber optic data modem.

Add the following to paragraph 3.3, Trench for Conduit:

- E. Directional Boring:
  - 1. Boring will be allowed in place of trenching.

Traffic Signal 02892M - 1 of 2

Delete line A of paragraph 3.10, Remove and Salvage Existing Equipment, and replace with the following:

## 3.10 REMOVE AND SALVAGE EXISTING EQUIPMENT

A. Signal poles, messenger cable, signal and pedestrian heads, controller cabinets, junction boxes, other items as specified on plans remain the property of the DEPARTMENT. Contact Dale Lake at (801) 620-1606 or (801) 791-0270. Deliver to UDOT Region 1 at 169 N. Wall Ave., Ogden.

Add the following to Part 3, Execution:

## 3.11 INSTALL VIDEO DETECTION

- A. Install all video detection components per manufacturer's specifications.
- B. Mount video detection cameras on the luminaire arm on traffic signal poles. Mount cameras on the mast arm when no luminaire arm is available.
- C. Mount all video detection cameras on manufacturer-approved extension brackets provided by the CONTRACTOR.
- D. Aim and set camera positions and program detection areas per ENGINEER's direction.

# SECTION 02922 M

# SEED, TURF SEED, AND TURF SOD

# PART 3 EXECUTION

Add the following to Part 3, Execution:

# 3.7 IRRIGATION SYSTEM

A. As necessary, repair or replace sprinkler system prior to placing turf sod. Use caution when removing existing sod and preparing grade.

# SECTION 02961 M ROTOMILLING

Add	the	follo	wing	to	section	3.	1:

- F. Locate and lower manholes, catch basins, water valves, etc, before rotomilling.
- G. Determine location of all utilities or hazards prior to rotomilling. Repair of damage to utilities or contractor's equipment shall be at contractor's expense.

Rotomilling 02961 M - 1 of 1

#### SECTION 03310 M

# STRUCTURAL CONCRETE

Add the following to paragraph 1.2, Related Sections:

# 1.2 RELATED SECTIONS

- L. Section 02635: Grates, Solid Covers, Frames, and Manhole Steps..
- M. Section 05120: Structural Steel.

Add the following to Section 03310, Part 2:

# 2.12 FRAMES, LIDS AND GRATES

A. Refer to Section 02635.

Add the following to Section 03310, Part 3:

# 3.18 FRAMES, LIDS AND GRATES

A. Install as specified by the manufacturer and as shown on Details.

# 3.19 CATCH BASINS

A. Install as per standard drawings.

Structural Concrete 03310M - 1 of 2

# 3.20 5 FT CONCRETE MANHOLE

- A. Sawcut existing storm drain pipe.
- B. Install manhole between cut section of pipe and connect existing pipe as per Section 02610 (Standard Specification and Special Provision).

#### SECTION 03392S

# CLEAR PENETRATING CONCRETE SEALER FOR BRIDGES

#### PART 1 GENERAL

# 1.1 SECTION INCLUDES

A. Materials and procedures for applying protective penetrating concrete sealers (**vinyl toluene acrylic silane polymer**) on bridge parapets, and sidewalk treads concrete surfaces.

## 1.2 REFERENCES

- A. AASHTO T 260: Sampling and Testing for Total Chloride Ion in Concrete and Concrete Raw Materials.
- B. ASTM C 267: Chemical Resistance of Mortars, Grouts, and Monolithic Surfacings and Polymer Concretes.
- C. ASTM C 666: Resistance of Concrete to Rapid Freezing and Thawing.
- D. ASTM E 274: Skid Resistance of Paved Surfaces Using a Full-Scale Tire.

#### 1.3 SUBMITTALS

- A. Certificate of Compliance to the ENGINEER or the Construction and Materials Division.
- B. One liter of the product to the ENGINEER for each lot of material
- C. Material Safety Data Sheets (MSDS).
- D. Each container shall be clearly marked with lot numbers, date of manufacture, pertinent safety and handling information, and emergency contact phone numbers.

#### PART 2 PRODUCTS

# 2.1 PENETRATING CONCRETE SEALERS

- A. Vinyl toluene acrylic silane polymer blend penetrating sealant for concrete surfaces. Substitution of the alktrialkoxy film forming silane by silicones or siloxanes will not be permitted.
- B. Slight color dies are allowed for application purposes, with clear appearance within 7 days of application.
- C. Comply with Federal VOC requirements.
- D. Comply with requirements of Table 1:

Table 1

Table 1				
Penetrating Concrete Sealer Requirements				
* Properties	Requirements	ASTM	AASHTO	** UDOT
Accelerated Weathering	As Specified	C 666	T 260	
Freeze-thaw Test Medium	≤ 3 % Road Salt			Sealer Studies
Minimum Depth Penetration	≥ 5/32 in.			Sealer Studies
Freeze-thaw Weight Loss	<ul><li>6 %</li><li>300 Cycles</li></ul>			Sealer Studies
Chemical Resistance	Subsections: 1.1.2 1/1/3	C 267		
Friction Number	≥ 40	E 274		
Infrared Spectrogram	Materials Division Base Comparison			Materials Studies

<sup>\*</sup> Certified test results from a private accredited testing laboratory will suffice for acceptance.

<sup>\*\*</sup> Utah Department of Transportation, Materials and Research Division concrete sealer studies of 1986 and 1990.

#### PART 3 EXECUTION

#### 3.1 PREPARATION

- A. Clean concrete surfaces of latence, dirt, dust, grease, oil, and other contaminants using a low pressure hydro-wash, according to the manufacturers recommendations, without causing undue damage to the concrete surfaces or exposing the course aggregate of the concrete.
- B. Allow cleaned surfaces to sufficiently dry after cleaning process before applying sealant (2 hours minimum, or longer according to the manufacturers recommendations, which ever is greater). Apply sealants no later than 3 calendar days after cleaning the concrete surfaces.
- C. Supplier of the sealant product must have a technical support person available at the job site within 24 hours of notification for quality control purposes.
- D. Place the sealant material only after obtaining the approval from the ENGINEER.

#### 3.2 APPLICATION

- A. Application Rate:
  - 1. Based upon the residue content at a coverage rate of 0.012 pounds/ft<sup>2</sup>.
  - 2. Apply according to manufacturers recommendation for each of the following surfaces: Horizontal, Vertical, Overhead.
- B. The sealant solution shall not be diluted in any way.
- C. Use low pressure airless sprayers or horticulture type spray bars to allow proper application of material.
- D. Application Drying Time: Select a sealer with maximum drying time of 1½ hours, and the ability to allow traffic on the treated surfaces within 4 hours of application without tracking or damage to vehicles.
- E. Apply sealant only when ambient air and concrete temperatures are above 50 degrees F.
- F. Prevent sealant from blowing or tracking onto vehicles. Sealant shall not be applied when blowing winds, inclement weather or other conditions prevent proper application
- G. Upon application, meet the minimum Friction Number of 40 for at least 90 percent of friction numbers.

#### END OF SECTION

# **SECTION 03924S**

# STRUCTURAL CONCRETE REPAIR

#### PART 1 GENERAL

# 1.1 SECTION INCLUDES

- A. Refer to Location of Required Work sheets and restore to sound condition:
  - 1. 3-Bents at bent 3,6,8
  - 2. 12-Exterior Beam Ends at Bent 3,6,8
  - 3. 1-Bottom Flange and Web on Exterior Beam at Bent 8
  - 4. 1-Underside of Deck
  - 5. Fence Posts Concrete at Sidewalk

### 1.2 RELATED SECTIONS

- A. Section 03922: Delamination Repair
- B. Section 03935: Epoxy Injection and Sealing

#### PART 2 PRODUCTS

#### 2.1 MATERIALS

A. Refer to Sections 03922 and 03935.

# 2.2 BEAM END REPAIR SURFACE SEALING MATERIAL

- A. Non-penetrating.
- B. Use an approved concrete epoxy sealer product from the Accepted Products Listing available at <a href="http://www.dot.utah.gov/res">http://www.dot.utah.gov/res</a>.

# 2.2 BEAM BOTTOM FLANGE REPAIR PATCHING MATERIAL

- A. Use vertical repair type of polymer cement or mortar for patching
- B. Use an approved concrete epoxy sealer product from the Accepted Products Listing available at <a href="http://www.dot.utah.gov/res">http://www.dot.utah.gov/res</a>.

# PART 3 EXECUTION

#### 3.1 CRACK REPAIR

- A. Repair cracks from 1/64 inch to 1/4 inch wide by epoxy injection and sealing. See Section 03935.
- B. Repair cracks greater than 1/4 inch wide as "delaminated concrete."

#### 3.2 **DELAMINATION REPAIR**

- A. Repair delaminated concrete by delamination repair. Refer to Section 03922.
- B. Beam End Delamination Repair: Use a patching concrete.
- C. After concrete removal:
  - 1. Repair any crack found in a delaminated area according to Section 03935.
  - 2. After the injection operation, apply surface sealing after repairing the delaminated area.
- D. When surface sealing after crack injection and delamination repair operations:
  - 1. Use epoxy sealer for surface sealing exclusively.
  - 2. Apply sealer to a minimum beam length of 4 ft covering all surfaces in that beam segment.

#### 3.2 COLLISION BEAM REPAIR

- A. Special care needs to be taken without damaging the exposed strands while removing damaged concrete and cleaning corrosion.
- B. Use low-pressure hydrojetting or less than 15 pounds light hammers for concrete removal. Remove at least 1 inch concrete around the exposed strands.

END OF SECTION

#### **SECTION 03925 S**

# POLYMER OVERLAY

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

1. Materials and procedures for applying a protective crack treatment and bridge deck overlay using modified epoxies, or epoxy-urethane polymers and a broadcast aggregate wearing surface.

# 1.2 REFERENCES

- 1. ASTM D-638: Tensile Stress and load bearing capacity.
- 2. ASTM- C-566: Aggregate Testing
- 3. Mohs Scale Hardness Test
- 4. Sieve Analysis: Aggregate Gradation
- 5. ASTM C-109: Compressive Strength of Hydraulic Cement Mortars.
- 6. ASTM C-778: Sampling
- 7. ASTM D-570: Water Absorption of Plastics
- 8. ASTM- D-2240: Rubber Property Durometer Hardness
- 9. ASTM C-501: Test method for Relative Resistance to Wear of Unglazed Ceramic Tile by the Taber Abrader.
- 10. ACI 503R: Adhesion to Concrete, Pull out Test.
- 11. California Test Method 419: Flexural Creep
- 12. ASTM D-790: Flexural Yield Strength
- 13. ASTM D-971: Surface Tension
- 14. NCHRP 244: Chloride Penetration test method
- 15. ASTM-4065-95: Dynamic Mechanical Analysis

#### 1.3 SUBMITTALS

1. Submit the **name of the manufacturer** of the Polymer Overlay materials at the Preconstruction Meeting, **from one or both of the following pre-approved suppliers:** 

<u>Supplier</u>	<b>Contact</b>	<u>Phone</u>
PolyCarb	<b>Puneet Singh</b>	216-272-6777
Sika Corp.	Scott Isaac	801-282-5440

Alternate suppliers will only be **considered** for testing purposes after the project has been bid and awarded, and should not be used for bidding purposes.

- 2. Submit at the Preconstruction Meeting, a Certificate of Compliance from an independent nationally recognized laboratory stating that the polymer overlay materials meet the requirements listed in Tables 1,2,3,4,5 and other material requirements contained in this specification.
- 3. Submit a name and phone number of the Manufacturer's Technical Support Representative at the Preconstruction Meeting.

#### PART 2 PRODUCTS

# 2.1 POLYMER BRIDGE DECK OVERLAY SYSTEM

1. Install a **modified epoxy, or epoxy-urethane bridge deck overlay system** consisting of surface preparation, application of a pretreatment for crack filling and bonding, and 2 coats of a polymer resin broadcast with a high wear, high skid aggregate that chemically cures to provide an impervious wearing surface.

# 2.2 STEEL SHOT BLAST

1. Clean concrete surfaces using a **Steel** Shot Blast in accordance with the recommendations of the polymer overlay manufacturer.

# 2.3 PRETREATMENT AND CRACK FILLER

1. After cleaning the concrete surface, apply a 2 component pretreatment to the bridge deck to fill minor cracks and increase the bond strength between the overlay and the deck surface. Pretreatment must comply with the physical properties of TABLE 1:

TABLE 1			
PHYSICAL PROPERTIES OF THE PRETREATMENT SYSTEM			
Property	Value		
Compressive Strength, min. psi	5500 - 6000		
Tensile Strength, min. psi	3100 - 3400		
Tensile Elongation, percent min.	35 " 5		
Water Absorption, percent by wt. Max.	<0.10		
Shore D Hardness, 77 EF min.	158 " 9		
Gel Time, minutes	48-52 (7 ounces)		
Adhesion to Concrete	100% failure in concrete		
Surface tension	Less than 0.001 pounds/ cubic inch		
Percent Solids	100		

# 2.4 POLYMER OVERLAY

1. After applying the Pretreatment, apply 2 layers of a two-part modified epoxy, or epoxy-urethane co-polymer resin and saturate it with a broadcast aggregate before it cures. The polymer overlay is to be free of any fillers, volatile solvents. Formulate the polymer volumetric mixing proportions (such as 1 part A to 1 part B), according to the manufacturers recommendations. The cured polymer system must comply with the physical requirements of TABLE 2.

TABLE 2		
PHYSICAL PROPERTIES OF THE MODIFIED EPOXY, or EPOXY-URETHANE POLYMER OVERLAY SYSTEM		
Property	Value	
Compressive Strength, min. psi	7,000	
Tensile Strength, min. psi	2,500	
Tensile Elongation, percent min.	35" 5	
Water Absorption, percent by wt. Max.	0.20	
Shore D Hardness, 70 EF min.	65" 5	
Gel Time, minutes	22 -31	
Abrasion Resistance, oz., max.	0.003	
Adhesion to Concrete	100% failure in concrete	
Flexural Creep: Total Movement in 7 days	0.006 in	
Flexural Yield Strength, min. psi	5000	
Percent Solids	100	

- 2. The modulus of the cured polymer system must comply with the requirements of TABLE 3, using a variable temperature Dynamic Mechanical Analysis (DMA) at a frequency of 1 HZ with a 0.3% strain using ASTM D-4065-95.
- 3. The cured polymer system must conform to a load bearing capacity of retaining 85+% of its original load bearing strength at (tensile strength) as 20% strain using ASTM method D-638.

TABLE 3			
VISCO-ELASTIC PROPERTIES OF THE MODIFIED EPOXY, OR EPOXY-URETHANE POLYMER SYSTEM			
TEMPERATURE	STORAGE MODULUS Pounds/sq. inch	LOSS MODULUS Pounds/sq. Inch	
14 EF	1.45 x 10 <sup>5</sup>	$8.70 \times 10^3$	
68 EF	1.02 x 10 <sup>5</sup>	$1.30 \times 10^4$	
122 EF	$5.80 \times 10^3$	$4.35 \times 10^3$	
140 EF	$1.45 \times 10^3$	$1.01 \times 10^3$	
158 EF	$8.70 \times 10^2$	$2.90 \times 10^2$	

# 2.5 AGGREGATE

1. Broadcast an aggregate wearing surface into the polymer system according to the manufacturers specifications. The aggregate used must be non-friable, non-polishing, clean and free of surface moisture. It must have a proven record of durability in this type of application. One hundred percent of the aggregate must have at least 1 mechanically fractured face for materials being retained on the 0.079 inch sieve. The aggregate must be thoroughly washed and kiln dried to a maximum moisture content of 0.2 % by weight (ASTM C-566). The recommended aggregate is Washington Stone. Alternate aggregates may be allowed upon approval by the manufacturer, and ENGINEER.

2. The aggregate must meet the physical properties of Table 4 and Table 5:

TABLE 4 Aggregate Properties			
Glacial Gravel	Basalt Quartzite Granite (% by Weight)		
SiO2	75.03		
$Al_2O_3$	11.49		
Fe2O3	3.57		
CaO	2.84		
MgO	1.59		
$SO_3$	0.08		
$Na_2O$	2.58		
$K_2O$	0.99		
Combined Alkali	3.20		
Ignition Loss	1.72		
Mohs Scale Hardr	ness 6.5		
ASTM 566 (water	absorption) 0.2%		

TABLE 5		
AGGREGATE GRADATION		
Sieve Size Percent Passing		
0.187 inch or #4	100	
0.079 inch or #10	10 -35	
0.033 inch or #20	0 - 10	

# PART 3 EXECUTION

# 3.1 SURFACE PREPARATION

1. **Light Surface Grinding:** Light grind the surface area of the deck in accordance with the requirements of the polymer overlay manufacturer and the ENGINEER. Grind areas near joints to a depth that will provide a smooth transition after overlay. Any costs associated with the light surface grinding are included in with the Bid Item for the Polymer Overlay System.

- 2. **Shot-Blasting:** Clean the entire deck by steel shotblasting to remove any oil, dirt, rubber, or other materials that in the opinion of the manufacturer or ENGINEER may be detrimental to the bonding and curing of the polymer overlay.
- 3. **Curbs:** In areas that cannot be reached with the steel shot blasting, such as curbs, sandblasting equipment or mechanical grinders are permitted with the approval of the manufacturer.
- 4. **Traffic:** Do not allow traffic on any portion of the deck that has been shotblasted. The overlay equipment will be allowed on cleaned surfaces under the supervision of the manufacturer.
- 5. **Weather:** All surfaces to be treated must be dry at the time of application. Do not apply the polymer overlay when it has rained within 24 hours, or it is expected to rain within 8 hours. Moisture content in the concrete substrate must not exceed 4.5% when measured by an electronic meter. The minimum recommended temperature is 50 degrees F and increasing. Do not apply the polymer overlays before April 15<sup>th</sup>, or after September 30<sup>th</sup>.

#### 3.2 APPLICATION

- 1. **Sound Surface:** Apply the Pretreatment, and Polymer Overlay Systems to a structurally sound concrete surface, and in accordance to the manufacturers specifications.
- 2. **Metered Mixing Equipment:** The use of metered equipment for storing, heating mixing, and dispensing of polymer resins is strongly recommended but not required. It is recommended that the equipment have positive displacement volumetric metering pumps controlled by a hydraulic power unit, with temperature controlled reservoirs, and metering at the pump outlets as well as cycle counting capabilities to monitor output.
- 3. **Layer Thickness:** Apply the number of layers, and use application rates of the liquid in the various layers as recommended by the manufacturer in order to achieve a minimum overlay thickness of 0.375 inch.
- 4. **First Layer:** Application of the Liquid: After manually or mechanically measuring and mixing of the components, evenly distribute the liquid on the clean, dry deck surface at the rate as recommended by the manufacturer. After the entire deck surface is wet, allow 1-2 hrs for the liquid to achieve full depth penetration into cracks as well as adequately encapsulate the steel grid if any. After the liquid is allowed to penetrate, medium size coarse silica sand may be

Polymer Overlay 03925 S- 7 of 10

broadcast evenly if the subsequent application is going to be applied after 8-12 hours.

- 5. **Second Layer:** Prior to the application of the second layer, if there exists any excess or loose aggregate from the previous coat, completely remove the excess aggregate by vacuum or with compressed air. After mixing of the components, evenly distribute the liquid on the clean, dry deck surface at the rate as recommended by the manufacturer.
- 6. **Time Limits for Aggregate:** After the application of the liquid in the first and second coats, the maximum time allowed before broadcasting of the aggregate based on the air temperature is as follows:

Above 90 EF	10 minutes
80 EF to 90 EF	15 minutes
70 EF to 79 EF	20 minutes
60 EF to 69 EF	25 minutes
50 EF to 59 EF	35 minutes

- 7. **Broadcasting Aggregate:** Broadcasting on decks must be by a method capable of dispensing the aggregate onto the deck in a uniform manner as directed or otherwise approved by the manufacturer. Broadcast the aggregate in a manner such that the surface is covered, no wet spots appear and the aggregate is in place before the co-polymer begins to gel. The aggregate must be dropped vertically in such a manner that the level of the liquid is not disturbed. In the first and second layers of the liquid, broadcast aggregate conforming to Tables 4 and 5 of this specification to saturation until no wet spots remain.
- 8. **Removal of Excess Aggregate:** After the overlay has hardened, remove all loose and excess aggregate with a power vacuum or other method prior to the application of subsequent coats
- 9. **Longitudinal Joints in the Overlay:** (i.e. between two adjacent lanes) Stagger and overlap longitudinal joints in the overlay between successive coats so that no ridges will appear.
- 10. **Traffic:** Traffic may be allowed on the final layer and on in between layers after the resin has cured (as determined by the manufacturer) and after removal of all excess, loose aggregate.
- 11. **Storage and Handling, Liquid Material:** Transport and store all material in their original containers inside a dry, temperature controlled facility. Maintain the material at a temperature between 60 EF to 90 EF.

- 12. **Job Site Storage:** Store the materials on the job site in a dry, weather protected facility away from moisture and within the temperature range of 60 EF to 90 EF. When the materials are transported or stored on the job in the application machine tanks, the material must also be maintained at a temperature of 60 EF to 90 EF.
- 13. **Handling of Liquid Materials on the Job:** Provide protective gloves, clothing, boots and goggles to workers and inspectors directly exposed to the material. Provide product safety data sheets to all workers and inspectors as obtained from the manufacturer
- 14. **Aggregate:** Store all aggregate in a dry, moisture-free atmosphere. Protect the aggregate from any contaminants on the jobsite and store it so as not to be exposed to rain or other moisture sources.

# 3.3 QUALITY CONTROL

- 1. **Technical Support Representative:** The manufacturer must have a representative on the jobsite at all times who, upon consultation with the ENGINEER, may suspend any item of work that is suspect and does not meet the requirements of this specification. Resumption of work will occur only after the manufacturer's representative and the ENGINEER are satisfied that appropriate remedial action has been taken by the contractor.
- 2. **Warranty:** The modified epoxy, or epoxy-urethane polymer manufacturer and the contractor must jointly guarantee the wearing surface against all defects incurred during normal traffic **for a period of 5 years**, for any delamination or reduced skid (less than 40). The guarantee period commences on the date of acceptance of work (typically the date traffic is allowed on surface).
- 3. **Samples:** The manufacturer must furnish at least one-quart sample of each component from each lot to the DOT laboratory to verify material supplied.

4. **Prior Performance:** The selected material must be from one or both of the following Pre-approved suppliers who must also have a satisfactory performance in Utah for at least 2 years from the time of placement, and nationally for at least 8 years.

<u>Supplier</u>	<b>Contact</b>	<u>Phone</u>
PolyCarb	<b>Puneet Singh</b>	216-272-6777
Sika Corp.	Scott Isaac	801-282-5440

Alternate suppliers will only be **considered** for testing purposes after the project has been bid and awarded, and should not be used for bidding purposes.

- 5. **Packing Requirement:** All materials must be packaged in strong, substantial containers. Identify the containers as Part A and Part B and plainly mark them with the name and address of the manufacturer, name of the product, mixing proportions and instructions, lot and batch numbers, date of manufacture, and quantity contained therein.
- 6. **Material Quality Control and Testing methods:** The materials used must meet the properties specified in the tables and other sections of this specification, and must also meet the following corresponding tests for quality control:
- 7. **Compressive Strength**: ASTM C109, *Compressive Strength of Hydraulic Cement Mortars*. Thoroughly mix the two components of the resin in their appropriate ratios. Add two volumes of graded silica sand in accordance with ASTM C778 to one volume of mixed resin. Prepare the samples according to the requirements of ASTM C109 and allow them to cure for 7 days at 73 EF " 4 EF.
- 8. **Tensile Strength and Elongation**: ASTM D638, *Tensile Properties of Plastics*, Specimen Type I or Type II. Cure samples at 73 EF " 4 EF and 50 " 5% relative humidity. Speed of testing must be 0.5 in/min.
- 9. **Water Absorption:** ASTM D570, *Water Absorption of Plastics*. Prepare sample specimens according to section 4.1 and allow them to cure at 73 EF " 4 EF and 50 " 5% relative humidity. Then carry out tests as per section 6.1.
- 10. **Shore D Hardness:** ASTM D2240, *Rubber Property Durometer Hardness*. Prepare specimen as per ASTM D570 section 4.1 and allow it to cure at 73 EF " 4 EF.

- 11. **Gel Time:** Use the following procedure to determine gel time. Measure 4 ounces of Part A and 2 ounces of Part B each at 77 EF, into an unwaxed paper cup and record the time and mix immediately. Pour 3.4 ounces of this mixture into a 6 ounce unwaxed paper cup and place on a wooden bench top. Starting twenty minutes from the time recorded above, probe the mixture every two minutes with a small stick until a small ball forms in the center of the container. The total time, including mixing, required for the ball to form is regarded as the gel time. Perform the test in a room or enclosed area maintained at 75 EF " 4 EF and 50 " 5% relative humidity.
- 12. **Abrasion Resistance:** ASTM C501, *Test Method for Relative Resistance to Wear of Unglazed Ceramic Tile by the Taber Abrader.* Perform tests using a CS-17 wheel and a 2.21 pound load for 1,000 cycles.
- 13. **Adhesion to Concrete**: ACI-503-R; Pull Out Test.
- 14. **Flexural Creep:** California Test Method 419.
- 15. Flexural Yield Strength: ASTM D-790
- 16. **Surface Tension:** ASTM D-971

**END OF SECTION** 

#### **SECTION 03934S**

# STRUCTURAL POTHOLE PATCHING

#### PART 1 GENERAL

# 1.1 SECTION INCLUDES

A. Repair potholes and delaminated areas on bridge deck, approach ramps, and approach slabs.

# 1.2 RELATED SECTIONS

- A. Section 01571: Temporary Environmental Controls
- B. Section 03055: Portland Cement Concrete
- C. Section 03390: Concrete Curing
- D. Special Provision 03381S: Polymer Overlay.

# 1.3 REFERENCES

A. AASHTO M 235: Epoxy Resin Adhesives.

#### 1.4 SUBMITTALS

A. Submit a plan for handling water approved by the ENGINEER before the water blasting operation begins.

#### PART 2 PRODUCTS

#### 2.1 MATERIALS

- A. Portland Cement Concrete: Class AA(AE), 3/4 inch maximum aggregate. Refer to Section 03055.
- B. Cement: Refer to Section 03055.
- C. Epoxy Resin Adhesive:
  - 1. Type II.
  - 2. Choose class rating consistent with the application temperature.
  - 3. AASHTO M 235.
- D. Water: Use water containing no hazardous or toxic materials.

# 2.2 EQUIPMENT

- A. Jackhammer: 30 pound class.
- B. Water Blast Equipment:
  - 1. Provide a complete concrete removal system capable of removing concrete to the specified depth.
  - 2. Equipped with a full rotation water jet. Use a water jet having an angle of impingement of 60 degrees or less as measured from the deck surface.

# 2.3 TESTING AND CALIBRATING HYDRODEMOLITION EQUIPMENT

- A. The ENGINEER designates a trial area to demonstrate that the equipment, personnel, and method of operations are capable of producing results satisfactory to the ENGINEER.
- B. Do not change parameters once the operation parameters of the hydrodemolisher are defined and satisfactorily demonstrated.
- C. Maintain an inventory of common wear parts and replacement accessories for the equipment on the job site.

# PART 3 EXECUTION

# 3.1 PREPARATION

- A. Locate all unsound concrete in the deck, approach ramps, approach slabs and mark a rectangular area surrounding each pothole in the presence of the ENGINEER.
  - 1. Refer to pothole patching plan.
  - 2. Remove any asphalt surfacing prior to sounding survey.

#### 3.2 CONCRETE REMOVAL

A. Use either the jackhammer or hydrodemolition method described below.

#### B. Jackhammer Method:

- 1. Saw Cuts: Make saw cuts 1 inch deep at the rectangular limits of the repair areas.
- 2. Remove concrete using 30 pound class jackhammer.
- 3. Operate jackhammer at an angle greater than 45 degrees as measured from the deck surface. Protect any reinforcing steel encountered.
- 4. Pneumatic hammers heavier than 15 pound class will not be permitted for removals in areas directly below the top reinforcing steel.

# C. Hydrodemolition Method:

- 1. Remove delaminated concrete to the required depth using hydrodemolition methods. Required depth depends on the delamination depth.
- 2. Provide the water necessary for the hydrodemolition operation. Use water containing no hazardous or toxic materials.
- 3. Collect water and debris from the removal operations retention basins or sediment traps. Refer to Section 01571 and Standard Drawing EN 5.
  - a. Use pond liners to limit the amount of water leached into the soil from retention basins at the ends of the bridge. Contain waste water, along with concrete debris from the removal operation, in holding ponds for 12 hours before discharging of the water.
  - b. The ponds must be equipped with a turn-down elbow to eliminate oil or floatables from being discharged. Dispose of remaining material in the holding ponds in the proper manner.
  - c. Clean all water which is returned to the stream bed of sediments and debris. Use temporary slope drains to return water to the stream. Do not allow water to run across traveled lane.

# 4. Light Jackhammer Removal Method:

- a. Use a jackhammer to remove concrete that cannot be removed with the water blast equipment.
- b. Operate jackhammer at an angle greater than 45 degrees as measured from the deck surface. Protect any reinforcing steel encountered.
- c. Pneumatic hammers heavier than 15 pound class will not be permitted for removals in areas directly below the top reinforcing steel.

#### D. Blow Through:

1. If removal blows completely through the bridge deck, immediately stop the equipment and make the necessary adjustments to limit the area of complete concrete removal. Use sandbags to limit the flow of water through the hole, if necessary.

- 2. Lower a rope through the hole and lift a 3/4 inch thick piece of plywood large enough to cover the hole with a 2 inch overlap on all sides.
- 3. Secure the plywood tightly against the bottom of the slab using 1/4 inch to 1/2 inch threaded tie rods fastened to 2 x 4 studs at the top of the deck. Remove the forms as soon as the concrete is set and patch the hole.
- 4. Use treated plywood to facilitate stripping.

#### 3.3 BONDING CONCRETE

- A. Apply an epoxy resin adhesive to the repair area to assist in bonding the fresh concrete to the hardened concrete.
  - 1. Apply the material according to the manufacturer's specifications.
  - 2. Keep the repair area clean until new concrete has been placed.

# 3.4 PATCHING CONCRETE

- A. Sandblast clean all exposed concrete surfaces and reinforcing steel prior to placing new concrete. Place concrete within 4 hours after sandblasting has been completed.
- B. Provide new rebar splices to existing rebars, equivalent size, wherever a section loss greater than 50 percent occurs.
- C. Place concrete and strike off level with deck surface. Cure a minimum of 4 days using the water method. Refer to Section 03390, Part 3.
- D. Patch failure: if the patch fails to bond to the existing concrete, remove the patch completely and repair the pothole again.
- E. Apply pothole patching material in accordance with the recommendations of the manufacturer and the ENGINEER.

#### 3.5 PROTECTION

A. Prevent debris from falling into streams, pedestrian areas, traffic areas, or railroad tracks.

END OF SECTION

#### **SECTION 05831S**

# EXPANSION JOINT MODIFICATION JOINT GLAND REPLACEMENT

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Remove existing expansion joint system from sidewalk and install new expansion Joint system at Bent 3, and 8.
- B. Remove existing expansion joint gland from bridge deck and install new joint Gland at Bent 3, 6, and 8.

# 1.2 RELATED SECTIONS

- A. Section 03055: Portland Cement Concrete.
- B. Section 03211: Reinforcing Steel and Welded Wire.
- C. Section 03310: Structural Concrete.
- D. Section 05120: Structural Steel.

# 1.3 REFERENCES

- A. AASHTO M 111: Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- B. AASHTO M 235: Epoxy Resin Adhesives.
- C. AASHTO M 270: Structural Steel for Bridges.
- D. AISC: American Institute of Steel Construction.
- E. ASTM C 578: Rigid, Cellular Polystyrene Thermal Insulation.

Expansion Joint Modification 05831S - Page 1 of 5

- F. ASTM D 395: Rubber Property-Compression Set.
- G. ASTM D 412: Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers-Tension.
- H. ASTM D 471: Rubber Property-Effect of Liquids.
- I. ASTM D 573: Rubber-Deterioration in an Air Oven.
- J. ASTM D 1149: Rubber Deterioration-Surface Ozone Cracking in a Chamber.
- K. ASTM D 2240: Rubber Property-Durometer Hardness.
- L. Federal Specification TT-S-00230:

# PART 2 PRODUCTS

#### 2.1 MATERIALS

- A. Portland Cement Concrete: Class AA(AE). Refer to Section 03055.
- B. Cement: Refer to Section 03055.
- C. Lubricating Material: Follow Federal Specification TTS-00230.
- D. Epoxy Resin Adhesive: Follow AASHTO M 235.
  - 1. Type II.
  - 2. Choose class rating consistent with the application temperature.
- E. Reinforcing Steel (Coated): Refer to Section 03211.
- F. Rigid Plastic Foam: Type 9, density of 2 lbs/ft<sup>3</sup>. ASTM C 578.

G. Neoprene Gland: Single convolution type with the following physical properties:

Table 1

Property Method	Requirements	ASTM
Tensile Strength, min. psi	2,000	D 412
Elongation at break, min. percent	250	D 412
Hardness, Type A Durometer (modified)	$55 \pm 5$	D 2240
Compression Set, 70 hr. at 212 degrees F. Method B (modified)	40 percent	D 395
Oven Aging, 70 hr. at 212 degrees F. Tensile Strength. Loss, max. Elongation, loss, max.	20 percent 20 percent	D 573
Hardness, Type A Durometer (points change)	0 to + 10	
Oil Swell, ASTM Oil 3, 70 hr at 212 degrees F. Weight Change, max	45 percent	D 471
Ozone Resistance, 20 percent Strain, 300 pphm in air 70 hr. at 104 degrees F. (modified)	No cracks	D 1149

# 2.2 **JOINT SYSTEM**

A. Use Watson-Bowman 3" neoprene foam compression seal model "Wabo Inverseal" system.

# 2.3 **JOINT GLAND**

- A. Field verify the existing steel extrusion system, use the correct joint gland type and size from only one brand of the following alternates.
  - 1. Wabo Strip Seal System
  - 2. Structural Accessories Strip Seal System
  - 3. D. S. Brown Strip Seal System

#### PART 3 EXECUTION

#### 3.1 CONCRETE REMOVAL

- A. Repair spalling, damaged concrete, retaining existing reinforcing steel in place. All repairs shall be made as directed by the ENGINEER.
- B. Use jackhammer method to remove existing concrete.
  - 1. Partial Depth Removal: Use 30-pound class hand operated jackhammers or smaller.
  - 2. Full Depth Removal: Use 90-pound class hand operated jackhammers or smaller.
  - 3. Operate jackhammers at an angle greater than 45 degrees as measured from the deck surface
- C. Prevent debris from falling into pedestrian areas, traffic areas and on railroad tracks.

#### 3.2 REINFORCING STEEL

- A. Existing Reinforcing Steel: Clean steel that remains in place thoroughly of all corrosion and adhering materials by sandblasting.
- B. New Reinforcing Steel: Place coated reinforcing steel after sandblasting operations are complete.

# 3.3 SYSTEM INSTALLATION

- A. Install expansion joint system according to the manufacturer's recommendations.
- B. A factory-trained representative must be present during setting of the system, contact Steve Brandt at 909-867-2161 during placement of concrete, installation of neoprene seal element, and during the watertight integrity test.

# 3.4 **JOINT WIDTH**

- A. Form the joint width, as shown on the plans, using rigid plastic foam. Anchor securely.
- B. Place rigid plastic foam between sections of concrete parapet to maintain separation of sections.

# 3.5 PLACE CONCRETE

- A. Clean concrete and steel surfaces before coating with an epoxy adhesive. Follow adhesive manufacturer's application instructions.
- B. Place Concrete according to Sections 03055 and 03310.

# 3.6 INSTALL JOINT GLAND

- A. Install the new gland according to the manufacturer's installation procedure.
- B. The neoprene seals shall be in continuous lengths spanning the entire roadway Width.
- C. Clean the full perimeter on the wall of the steel extrusion.
- D. Lubricate the full perimeter on the walls of the steel extrusion cavity before installing the neoprene gland.

# 3.7 WATERTIGHT INTEGRITY TEST

- A. Joint areas must be capable of holding water for 15 minutes without leaking.
- B. If joint areas fail the test, remove any leaking seals, clean steel extrusion grooves, and reinstall the seals.
- C. Install new seals when leakage persists.

END OF SECTION

#### **SECTION 07923S**

# HOT POURED JOINT SEALER

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

A. This work shall consist of furnishing and placing joint sealer between approach ramps and approach slabs in accordance with these specifications or as ordered by the ENGINEER.

# 1.2 RELATED SECTIONS

A. Section 03152: Concrete Joint Control.

## 1.3 CERTIFICATION

A. Submit the manufacturer's certification of compliance for all shipments.

#### 1.4 DELIVERY

- A. Deliver packaged material in unopened packages with labels clearly indicating the following:
  - 1. Name of manufacturer
  - 2. Manufacturer's product name or product number
  - 3. Manufacturer's batch or lot number
  - 4. The application temperature range
  - 5. The recommended application temperature and the safe heating temperature range

#### PART 2 PRODUCTS

#### 2.1 MATERIALS

A. Joint Sealer, Hot Poured: This material shall consist of a hot applied, single component, low-modulus elastic sealant meeting the requirements of AASHTO M 301. The sealant shall allow up to 200% elongation at temperatures down to –20 degrees C.

#### PART 3 EXECUTION

#### 3.1 **JOINT SEALANT REPAIR**

- A. Completely remove old sealant.
- B. Clean out joint completely using water blasting, sand blasting or compressed air.
- C. Repair adjacent concrete as needed, using a form to leave straight vertical edge for sealant installation.
- D. A good bond with the existing concrete is required, and a bonding agent may be needed.
- E. Use a form to leave a straight vertical edge for sealant installation when replacing concrete materials.

# 3.2 APPLICATION

- A. The new sealant materials shall be heated, maintained, and placed as recommended by the sealant manufacturer.
- B. Primer materials shall be applied strictly as specified by the joint sealer manufacturer on the surfaces to which the joint sealer is intended to adhere. Primed surfaces which may have been contaminated by dirt or other foreign material shall be cleaned and primed again prior to the application of the joint sealer.
- C. The hot sealant shall be poured into the joint in a single layer, except where lateral flow is a problem. The joint shall be slightly overfilled and the excess sealer shall be leveled with a U or V shaped squeegee to provide a thin layer of sealer spread over the horizontal pavement surfaces next to the joint.

- D. Any joint sealer that is not completely bonded to the surface after being in place for 72 hours shall be removed, the joint prepared again and the application repeated as specified.
- F. Replace the sealant material picked up or pulled out at the Contractor's expense. The Contractor will remain liable for any damage to the traveling public resulting from sealant application or sealant pull out.

# 3.2 **JOINT PROTECTION**

A. The completed joint shall be protected against damage from traffic during the curing time.

END OF SECTION